

1. A group of 48 students goes on a school camping trip. Of all the students on the trip, 16 are in fifth grade. What is $\frac{16}{48}$ in simplest form?

A $\frac{1}{3}$
 B $\frac{4}{12}$
 C $\frac{8}{24}$
 D $\frac{1}{2}$

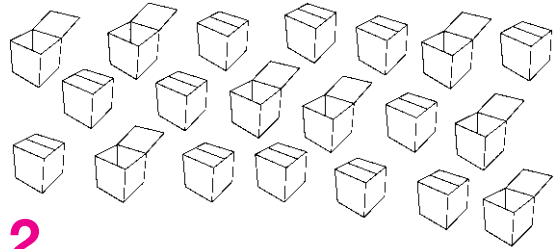
2. Monica feeds her dogs a total of 18 ounces of chow each day. How many days will 486 ounces of chow last?

A 21 days
 B 27 days
 C 43 days
 D 49 days

3. In the year 2005, there were 1,579,851 Arizonans under 18 years old. What is the value of the digit in the ten-thousands place in 1,579,851?

A Ten thousand
 B Fifty thousand
 C Seventy thousand
 D Ninety thousand

4. What fraction of these boxes are open? Write your answer in simplest form.



$\frac{2}{5}$

5. Mr. Lum gets 875 free minutes each month on his cell phone plan. How many free minutes does Mr. Lum get in 9 months?

7,875 minutes

6. The table shows the total cost of large packages of diapers.

Number of Packages	4	6	7	9
Total Cost	\$48	\$72	\$84	?

Describe how to find the cost of 9 large packages of diapers.

Multiply $9 \times \$12$:

9 large packages

of diapers will

cost \$108.

1. Find the product: $\frac{2}{3}$ of 12.
- A 72
B 18
C 9
D 8
2. Jenny spent 24 days at Granny's house last summer. Her sister spent $\frac{3}{8}$ of that time at Granny's. How many days did Jenny's sister spend at Granny's house last summer?
- A 6
B 9
C 14
D 64
3. Which decimal is equal to $\frac{34}{100}$?
- A 3.4
B 0.34
C 0.034
D 0.0034

4. Edgar went to physical education class 72 times this year. He spent $\frac{3}{4}$ of those classes outside. How many of Edgar's physical education classes this year were held outside?

$$\frac{3}{4} \times 72 = \frac{216}{4} =$$

54 classes outside

5. During $\frac{5}{8}$ of those physical education classes, Edgar played games involving running. During how many of this year's physical education classes did Edgar have to run?

$$\frac{5}{8} \times 72 = 45$$

classes

6. Find each product.

$$\frac{5}{6} \text{ of } 6 \quad \underline{\mathbf{5}}$$

$$\frac{3}{7} \text{ of } 49 \quad \underline{\mathbf{21}}$$

$$\frac{2}{5} \text{ of } 20 \quad \underline{\mathbf{8}}$$

$$\frac{1}{10} \text{ of } 70 \quad \underline{\mathbf{7}}$$

$$\frac{6}{9} \times 18 \quad \underline{\mathbf{12}}$$

$$\frac{4}{5} \times 45 \quad \underline{\mathbf{36}}$$

$$\frac{5}{12} \times 36 \quad \underline{\mathbf{15}}$$

$$\frac{8}{9} \times 90 \quad \underline{\mathbf{80}}$$

1. Find the product in simplest form:

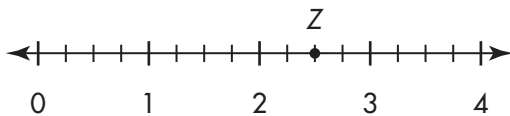
$$\frac{3}{5} \times \frac{4}{7}$$

- A $\frac{7}{35}$
- B $\frac{12}{35}$**
- C $\frac{12}{30}$
- D $\frac{7}{12}$

2. There is $\frac{5}{8}$ of a pie left over from last night. Jude eats $\frac{2}{15}$ of the leftover pie as a midnight snack. How much of the whole pie does Jude eat? Simplify your answer if possible.

- A $\frac{5}{12}$
- B $\frac{2}{15}$
- C $\frac{5}{60}$
- D $\frac{1}{12}$**

3. On the number line, $Z = ?$



- A $2\frac{1}{4}$
- B $2\frac{1}{2}$**
- C $2\frac{3}{4}$
- D $3\frac{1}{2}$

4. In Carolina's class, $\frac{6}{16}$ of the children have freckles. Of the children with freckles, $\frac{1}{12}$ have red hair. What fraction of Carolina's class has red hair and freckles? Simplify your answer, if possible.

$$\frac{1}{12} \times \frac{6}{16} =$$

$$\frac{1}{2} \times \frac{1}{16} = \frac{1}{32} \text{ of}$$

Carolina's class.

5. There are 32 children in Carolina's class. How many have both red hair and freckles?

$$\frac{1}{32} \times 32 = \frac{32}{32} =$$

1 person has both red hair and freckles.

6. Find each product. Simplify your answers, if possible.

$$\frac{6}{8} \times \frac{2}{7}$$

$$\frac{3}{14}$$

$$\frac{2}{3} \times \frac{1}{4} \times \frac{5}{6}$$

$$\frac{5}{36}$$

$$\frac{9}{12} \times \frac{4}{9}$$

$$\frac{1}{3}$$

$$\frac{3}{10} \times \frac{2}{5} \times 4$$

$$\frac{12}{25}$$

$$\frac{7}{16} \times \frac{8}{14}$$

$$\frac{1}{4}$$

$$\frac{5}{16} \times \frac{4}{15} \times 3$$

$$\frac{1}{4}$$

1. Find the product in simplest form:

$$1\frac{3}{5} \times 3\frac{1}{8}$$

A 5

B $3\frac{3}{40}$

C $\frac{64}{125}$

D $\frac{1}{5}$

2. During Primrose School's annual Walk for Education, Reba walked around the track $5\frac{5}{6}$ times. Holt walked around the track $1\frac{3}{5}$ times the number of times Reba did. How many times did Holt walk around the track? Simplify your answer.

A $3\frac{41}{128}$

B $5\frac{1}{8}$

C $9\frac{1}{3}$

D $9\frac{5}{16}$

3. $\frac{3}{12} > ?$

A 0.31

B 0.28

C 0.25

D 0.22

4. During the mayoral election, two debates were held between the candidates. The first debate lasted $1\frac{2}{3}$ hours. The second one was $1\frac{4}{5}$ times as long as the first one. How many hours long was the second debate? Estimate the product. Then find the actual product. Simplify if possible.

$$\text{Estimate} = 2 \times 2 = 4;$$

$$\text{Actual} = \frac{5}{3} \times \frac{9}{5} = \frac{9}{3}$$

$$= 3 \text{ hours long.}$$

5. Estimate the product. Then find the actual product. Simplify if possible.

$$\frac{3}{5} \times 5\frac{1}{3}$$

$$\text{est. } 5; 3\frac{1}{5}$$

$$4\frac{1}{4} \times 8$$

$$\text{est. } 32; 34$$

$$2\frac{4}{5} \times 6\frac{2}{7}$$

$$\text{est. } 18; 17\frac{3}{5}$$

$$1\frac{6}{9} \times 5\frac{2}{3}$$

$$\text{est. } 12; 9\frac{4}{9}$$

$$3\frac{3}{5} \times 10\frac{1}{4}$$

$$\text{est. } 40; 36\frac{9}{10}$$

$$7\frac{2}{9} \times 9$$

$$\text{est. } 63; 65$$

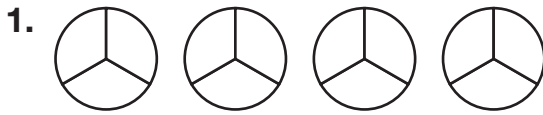
$$(1\frac{6}{7} - \frac{3}{4}) \times 7$$

$$\text{est. } 7; 7\frac{3}{4}$$

$$1\frac{1}{2} \times (4\frac{5}{6} + 2\frac{3}{8})$$

est.

$$16; 10\frac{13}{16}$$



$$4 \div \frac{1}{3} = ?$$

- A $\frac{4}{3}$
 B 4
 C 12
 D 13

2. Brenna has a piece of fabric that is 12 yards long. She wants to cut the fabric into strips. Each strip will be $\frac{2}{3}$ yard wide. How many strips will she have?

- A 36
 B 24
 C 18
 D 8

3. Find the product. Simplify your answer if necessary.

$$2\frac{1}{3} \times 1\frac{2}{3} = ?$$

- A $1\frac{1}{3}$
 B $3\frac{8}{9}$
 C 4
 D $11\frac{2}{3}$

4. Preesha has 6 pizzas. If she divides each pizza into eighths, how many people can have 2 pieces of pizza each?

$$\begin{aligned} 6 \div \frac{2}{8} &= 6 \times \frac{8}{2} = \\ (6 \times 8) \div 2 &= 48 \div \end{aligned}$$

$$2 = 24 \text{ people}$$

5. Ryan estimates that he uses $\frac{2}{3}$ cup of syrup each time he eats pancakes. How many times will he be able to eat pancakes without running out of syrup if he has a giant bottle of syrup that contains 48 cups?

$$\begin{aligned} 48 \text{ cups} \div \frac{2}{3} \text{ cup} &= \\ 48 \times \frac{3}{2} &= (48 \times 3) \\ \div 2 &= 144 \div 2 = \end{aligned}$$

$$72 \text{ times}$$

If Ryan uses only $\frac{3}{8}$ cup syrup out of the giant bottle each time he eats pancakes, how many times will he be able to eat pancakes without running out of syrup?

$$\begin{aligned} 48 \text{ cups} \div \frac{3}{8} \text{ cup} &= \\ 48 \times \frac{8}{3} &= (48 \times 8) \div \end{aligned}$$

$$3 = 384 \div 3 =$$

$$128 \text{ times}$$

1. In a whipped cream-eating contest, Nick eats $4\frac{2}{7}$ bowls of whipped cream. His friend Marcia eats $2\frac{1}{5}$ times as many bowls of cream as Nick. How many bowls of cream does Marcia eat?

- A** $4\frac{2}{7} \times 2\frac{1}{5} = 9\frac{3}{7}$
B $4\frac{2}{7} + 2\frac{1}{5} = 6\frac{17}{35}$
C $4\frac{2}{7} - 2\frac{1}{5} = 2\frac{3}{35}$
D $4\frac{2}{7} \div 2\frac{1}{5} = 1\frac{73}{77}$

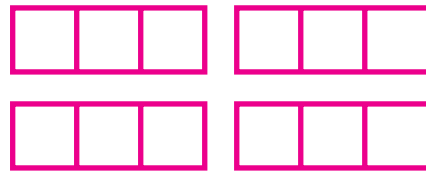
2. Sara's garden is 7 feet wide. She would like to make a stone path that crosses the width of the garden. The stones she will use are each $\frac{7}{9}$ of a foot wide. How many stones will Sara need?

- A** $7 \times \frac{7}{9} = 5\frac{4}{9}$
B $7 - \frac{7}{9} = 6\frac{2}{9}$
C $7 + \frac{7}{9} = 7\frac{7}{9}$
D $7 \div \frac{7}{9} = 9$

3. Daniel has $\frac{7}{12}$ of a yard of fabric. He uses $\frac{6}{15}$ of a yard. How much fabric does he have left over?

- A** $\frac{7}{12} \div \frac{6}{15} = 1\frac{11}{24}$
B $\frac{7}{12} + \frac{6}{15} = \frac{59}{60}$
C $\frac{7}{12} - \frac{6}{15} = \frac{11}{60}$
D $\frac{7}{12} \times \frac{6}{15} = \frac{7}{30}$

4. The students in Mr. Mac's class have to create video presentations for a science project. They have 4 hours in which to present their videos, and each video must last $\frac{1}{3}$ of an hour. How many videos will there be time for in 4 hours? Draw a picture, write an equation, and solve.

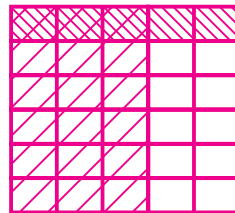


$$4 \div \frac{1}{3} = \frac{4}{1} \div \frac{1}{3} =$$

$$\frac{4}{1} \times \frac{3}{1} = \frac{12}{1} = 12;$$

there will be time for 12 videos.

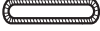



5. By mid-July, Barron still has $\frac{3}{5}$ of the books on his summer reading list left to read. During the last two weeks of July, he reads $\frac{1}{6}$ of the books that are left. What fraction of the books on his reading list does Barron read in the last two weeks of July? Draw a picture, write an equation, and solve. Simplify.



$$\frac{1}{6} \times \frac{3}{5} = \frac{3}{30} = \frac{1}{10} \text{ of}$$

his reading list.

1. Use a ruler. Brent makes a shirt with buttonholes that are $\frac{5}{8}$ inch wide. Which buttonhole is $\frac{5}{8}$ inch wide?

- A 
- B** 
- C 
- D 

2. Mack wears a shirt with the letter E on it. Which shows what the E would look like if Mack stands in front of a mirror and looks at his reflection?

- A E
- B 
- C 
- D** 

3. Sharla's garden has 4 straight sides and 4 right angles. Each side is 5 feet long. What is the shape of Sharla's garden?

- A** Square
- B Triangle
- C Pentagon
- D Trapezoid

4. Ty's dog weighs p pounds. His cat weighs 34 pounds less than the dog. Write an expression that tells how to find how much Ty's cat weighs.

$$p - 34$$

5. The table shows the breeds of dogs at a dog show.

Breed	Number of Dogs
Cocker Spaniel	4
Fox Terrier	4
German Shepherd	3
Labrador Retriever	8
Staffordshire Terrier	5

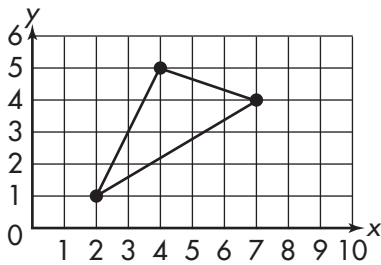
What fraction of the dogs are terriers? Write your answer in simplest form.

$$\frac{3}{8}$$

1. An engineer measures the length of a full-size car. Which is most likely to be the correct measurement?

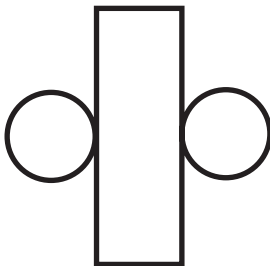
- A** 2.5 meters
- B** 2.5 kilometers
- C** 2.5 centimeters
- D** 2.5 millimeters

2. Brian draws a triangle. What are the coordinates of the triangle's vertices?



- A** (1, 2), (5, 4), (4, 7)
- B** (1, 1), (5, 5), (4, 4)
- C** (2, 1), (4, 5), (7, 4)
- D** (2, 2), (2, 4), (3, 1)

3. A worker cuts a pattern out of a sheet of metal.



Which could be made from the pattern?

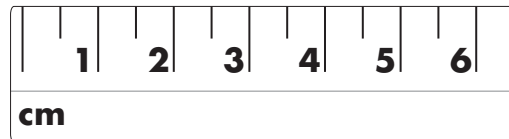
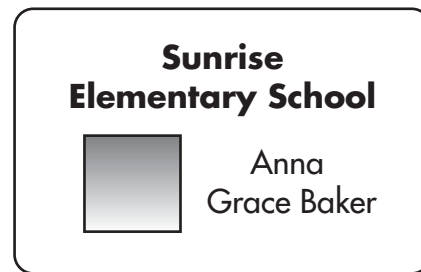
- A** Cone
- B** Cube
- C** Sphere
- D** Cylinder

4. Kate takes a 90-minute ballet class each week for 40 weeks.

- a. What is the total number of minutes of class?
- b. What is the total number of hours of class?

**3,600 minutes;
60 hours**

5. Anna measures the width of her school ID card.



What is the width of the card in millimeters?

55 mm

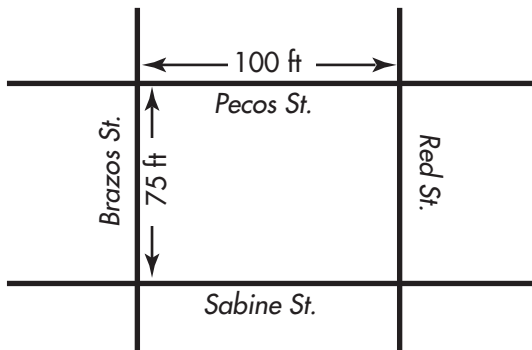
6. The table shows the distance between cities in Texas.

Cities	Distance (miles)
Austin to Dallas	195
Dallas to Midland	330
Midland to El Paso	305

Dale starts in Dallas, goes through Midland, and stops in El Paso. How far does he drive?

635 mi

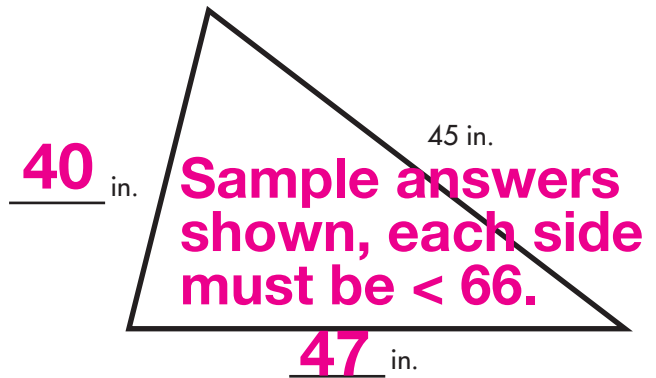
1. The map shows the lengths of the streets on a neighborhood block.



Lupe runs all the way around the block 4 times. How far does she run?

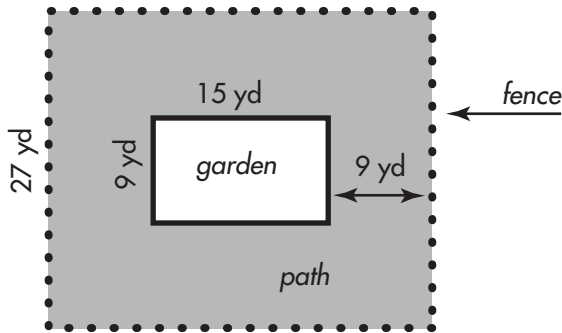
- A 350 feet
 B 700 feet
 C 1,400 feet
 D 1,600 feet
2. Erin has a length of rope that is 1 yard long. Which could she best measure with the rope?
- A The length of a green bean
 B The height of a step ladder
 C The length of a sports field
 D The height of a clock tower
3. The total weight of a truck and its load is w pounds. Let l be the weight of the load. When it is empty, the truck weighs 2,439 pounds. Which equation tells how to find w when you know l ?
- A $2,439 - l = w$
 B $2,439 \times l = w$
 C $2,439 \div l = w$
 D $2,439 + l = w$

4. Fill in the missing lengths so that the perimeter of the triangle is 132 inches.



5. Gina has filled $\frac{3}{8}$ of the space in her computer's memory. What fraction of the computer's memory is still open?
- 5
8
6. Frank had \$156.87. He spent \$21.58 to buy a gift for his sister. He also earned \$45.50. How much money does Frank have now?
- \$180.79

1. City Park has a rectangular garden. A path goes around the garden, and a fence goes around the path.



Which does 9×15 tell you?

- A The area of the path
- B** The area of the garden
- C The perimeter of the fence
- D The perimeter of the garden

2. This is the top view of a solid.



Which could be the solid?

- A**
- B
- C
- D

3. A school cafeteria has a rectangular floor.



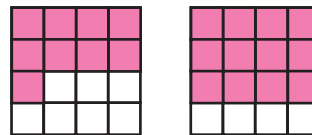
What is the area of the floor?

4,340 ft²

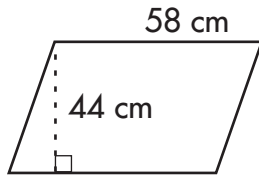
4. A shoe store has 192 shoeboxes sorted into 16 stacks. Each stack has the same number of boxes. How many boxes are in each stack?

12

5. Use these squares to show $\frac{9}{16} < \frac{3}{4}$.

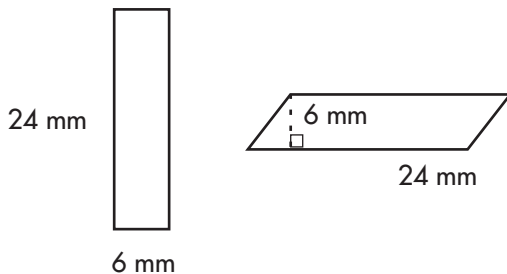


1. Marshall hangs a mirror in the shape of a parallelogram on his wall.



What area of the wall does the mirror cover?

- A 102 cm²
 - B 204 cm²
 - C 1,276 cm²
 - D 2,552 cm²**
2. Georgia draws a rectangle and a parallelogram.



Which best describes the areas of the two shapes?

- A The area of the rectangle is half the area of the parallelogram.
- B The area of the rectangle is equal to the area of the parallelogram.**
- C The area of the rectangle is four times the area of the parallelogram.
- D The area of the rectangle is one-fourth the area of the parallelogram.

3. Four rock climbers go up a mountain. The table shows what fraction of the mountain each person has climbed.

Climber	Fraction of Mountain
Janelle	$\frac{2}{3}$
Kerry	$\frac{1}{4}$
Lydia	$\frac{5}{6}$
Monique	$\frac{3}{8}$

List the climbers in order from closest to farthest from the top of the mountain.

Lydia, Janelle, Monique, Kerry

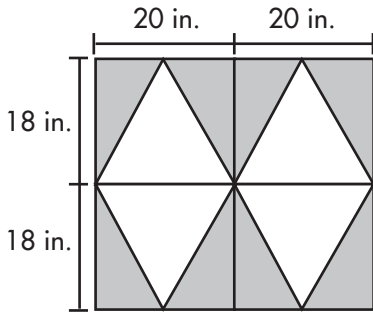
4. The table shows the speed of four different objects.

Object	Speed (km/h)
Jet	680
Sound	1,225
Rocket	39,895
Light	1,079,252,848.8

What is the difference between the speed of the rocket and the speed of light?

1,079,212,953.8 km/h

1. Kevin covers a rectangular tabletop with triangular tiles.



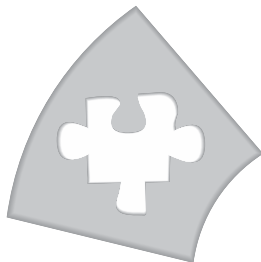
What is the total area of the white tiles?

- A 180 in²
 - B 720 in²**
 - C 1,260 in²
 - D 1,440 in²
2. LaShawn has one piece left to fit into a puzzle.

Last Piece



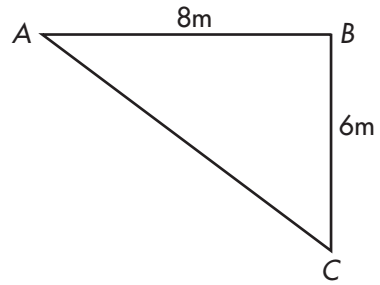
Puzzle



Which should LaShawn do to make the piece fit in the puzzle?

- A Rotate it 90° counterclockwise.
- B Rotate it 90° clockwise.**
- C Reflect it over a vertical line.
- D Reflect it over a horizontal line.

3. What is the area of $\triangle ABC$?



24 m²

4. Sam is saving money for new camping equipment. He spends $\frac{3}{16}$ of his savings on a sleeping bag and $\frac{1}{4}$ of his savings on a backpack.

a. Which item is more expensive?

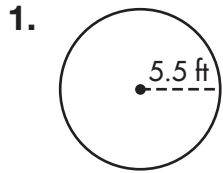
backpack

b. What fraction of his savings will Sam have left?

$\frac{9}{16}$

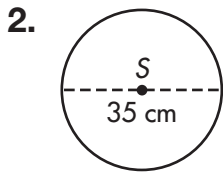
5. The Voyager spacecraft traveled *four billion four hundred twenty-nine million five hundred eight thousand seven hundred eight* miles to get to the planet Neptune. Write this distance in standard form.

4,429,508,700



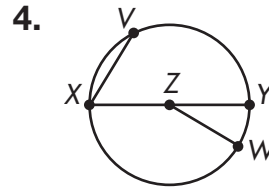
What is the diameter of the circle?

- A 34.54 ft
- B 17.27 ft
- C 11 ft**
- D 5.5 ft



Using $\pi = 3.14$, find the circumference of circle S.

- A 11.146 cm
 - B 38.14 cm
 - C 54.95 cm
 - D 109.9 cm**
3. Douglas has had 56 days of school this year. The weather was cloudy on $\frac{2}{7}$ of those days. How many days were cloudy?
- A 196
 - B 28
 - C 16**
 - D 8



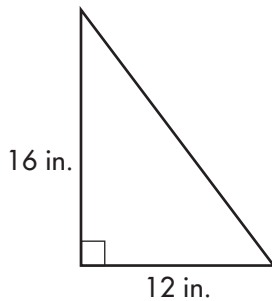
Identify each of the following figures in circle Z: radius, diameter, chord, central angle.

radius: \overline{ZX} , \overline{ZY} , or \overline{ZW} ; diameter: \overline{XY} ; chord: \overline{XV} or \overline{YW} ; central angle: $\angle XZV$ or $\angle YZW$

5. Sebastian is decorating a picture frame for Mother's Day. He needs to cut a length of ribbon to go around the circumference of a circular piece of glass that has a radius of 2.5 inches. How long should the ribbon be?
Use $\pi = 3.14$.

The ribbon should be 2.5 inches $\times 2 \times 3.14 = 15.7$ inches long.

1. The drawing shows a shelf from a corner cabinet



What is the area of the shelf?

- A 4 in²
 B 48 in²
 C 96 in²
 D 192 in²
2. Grace buys a set of 14 notebooks. Each notebook has 85 pages. What is the total number of pages?
- A 1,190
 B 1,170
 C 425
 D 340
3. Anna, Pedro, and Cara own a shop. They agree to share the profit equally. If the profit is \$5,902, which is the best estimate of each owner's share?
- A \$2,000
 B \$3,000
 C \$5,000
 D \$6,000

4. A rectangular rug is l feet long and w feet wide, with a perimeter of 30 feet. Both l and w are whole numbers between 5 and 10 feet. Fill in the blanks to complete this sentence:

The area of the rug is at least **50 ft²** but not greater than **56 ft²**.

5. There are 12 dogs in a puppy training class. Ten of them have learned to sit. What fraction of the dogs have learned to sit? Write your answer in simplest form.

$$\frac{5}{6}$$

6. Write $>$, $<$, or $=$ in the blank to make the number sentence true.

$$\frac{9}{16} \quad \left(< \right) \quad \frac{3}{4}$$

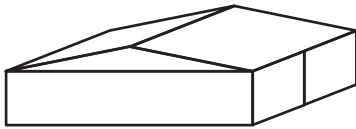
1. Tyrone uses blocks to make a model farm. Which building did he make with a cylinder and a cone?

A

chicken coop

B

silo

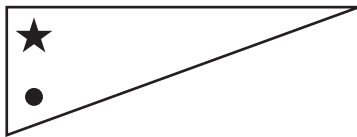
C

barn

D

water tank

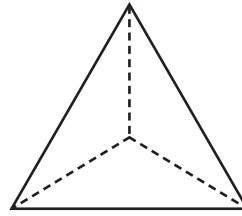
2. Nora makes a triangular flag. The angle with the star is a right angle. The angle with the circle is 58° .



What is the measure of the third angle?

- A** 32°
B 42°
C 58°
D 90°

3. What is the name for this solid?



triangular pyramid

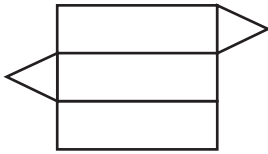
4. What is the greatest common factor of 32 and 48?

16

5. Last year an electric company charged 3.634 cents for one kilowatt-hour. This year the company charges 3.5 cents for a kilowatt-hour. How much less does a kilowatt-hour cost this year?

0.134 cents

1. At a recycling center, workers unfold boxes into flat sheets of cardboard. The drawing shows one of these flat sheets.



What was the shape of this box before the workers unfolded it?

- A** Triangular prism
B Rectangular prism
C Triangular pyramid
D Rectangular pyramid
2. A scout troop needs money to pay for a camping trip. The table shows what fraction of the money they need that the scouts have earned already.

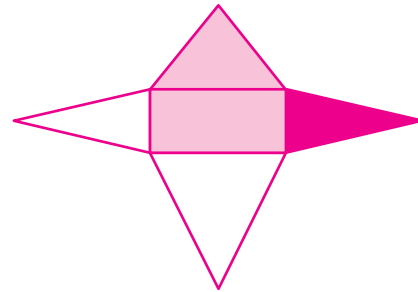
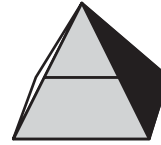
Camping Trip Fund-raisers

Activity	Fraction Earned
Car Wash	$\frac{1}{3}$
Bake Sale	$\frac{2}{5}$

What fraction of the money do the scouts still need to earn?

- A** $\frac{4}{15}$
B $\frac{3}{8}$
C $\frac{1}{2}$
D $\frac{3}{5}$

3. Draw the net of the solid below. Make sure the shaded parts of the net match the shaded parts of the pyramid.



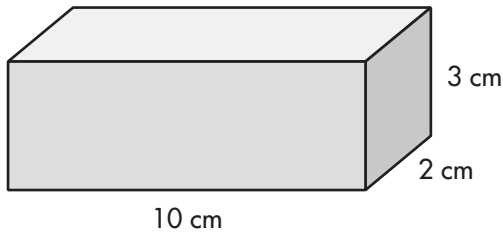
4. Before the swim meet today, Juan had won 5 ribbons. Today Juan won r ribbons. Now he has 7 ribbons. Write an equation that you could use to find r .

$$5 + r = 7, \text{ or } 7 - 5 = r, \text{ or } 7 - r = 5$$

5. A teacher has a list of 306 spelling words, including the word *iceberg*. She closes her eyes and picks 25 words from the list for a spelling bee. What are the chances that she chooses *iceberg*?

25 out of 306

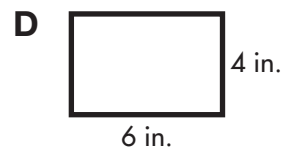
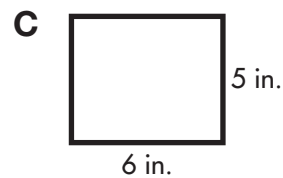
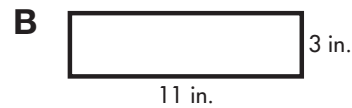
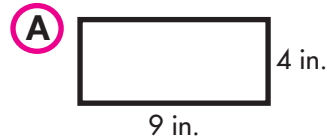
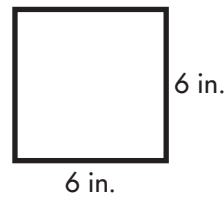
1. What is the surface area of the figure?



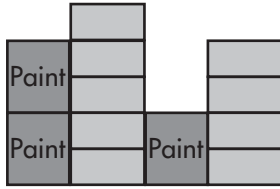
- A** 112 cm²
B 100 cm²
C 72 cm²
D 52 cm²
2. Jaxon is mailing a parcel that measures 20 inches long, 5 inches wide, and 1 inch tall. What is the surface area he will have to cover with brown mailing paper?
- A** 50 in²
B 210 in²
C 240 in²
D 250 in²
3. Paige's dad just made a new front door for their house. The door measures 84 inches by 54 inches by 2 inches. How many square inches of surface area will Paige have to paint if she paints the entire door?

9,624 in²

4. Which rectangle has the same area as this square?



1. The drawing below shows the front view of a stack of bricks and paint cans.



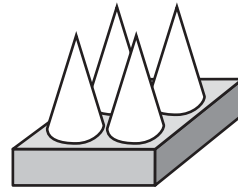
A worker on top of a ladder looks down at the top of the stack. Which could be the view she sees?



2. Maya wants to save \$665 for a trip. She can save \$35 every 3 weeks. How many weeks will Maya need to save \$665?

- A 12
 B 19
 C 38
D 57

3. Draw the right side view of this group of 4 cones sitting on a box.



4. The table shows the length from the collar of a shirt to each button down the front of the shirt.

Button	1st	2nd	3rd	4th
Length (inches)	$1\frac{3}{4}$	$3\frac{1}{2}$	$5\frac{1}{4}$	7

What is the distance from the collar down to the 5th button?

$8\frac{3}{4}$ inches

5. A school has a computer for every 17 students. If the school has 714 students, how many computers does it have?

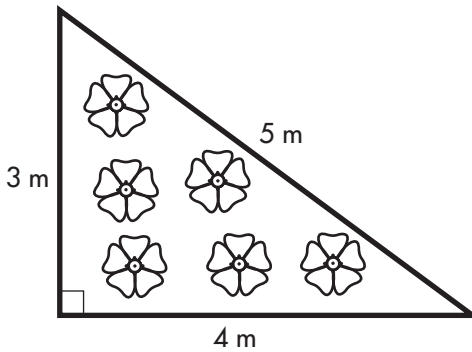
42 computers

1. This shampoo bottle is a rectangular prism.



What is the greatest volume of shampoo the bottle could hold?

- A 15 in³
 - B 27 in³
 - C 54 in³
 - D 81 in³**
2. Mari's garden is a right triangle. What is the least amount of fencing Mari will need to enclose her garden completely?

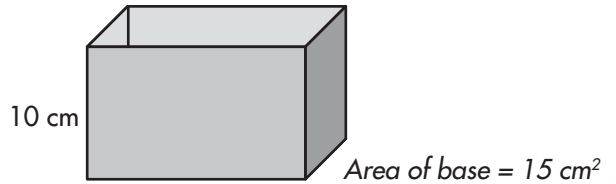


- A 60 m
- B 12 m**
- C 10 m
- D 6 m

3. A hotel costs \$56 for a weekday night and \$70 for a weekend night. If Jason stays at the hotel 2 weekday nights and 1 weekend night, which gives the cost?

- A $2 + 56 + 70$
- B $2(56) + 70$**
- C $56 + 2(70)$
- D $2(56 + 70)$

4. Makena needs to store 100 cm³ of spaghetti sauce. She has this plastic container.

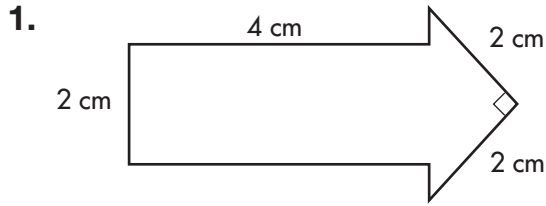


- a. Will all the sauce fit in the container?
- b. If so, what volume of space is left over? If not, what volume of sauce is left over?

Yes, it fits with 50 cm³ space left.

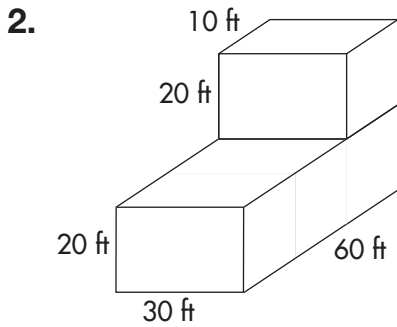
5. Wendy uses $\frac{1}{8}$ teaspoon of curry, $\frac{3}{8}$ teaspoon of garlic, and $\frac{3}{8}$ teaspoon of ginger as the spices in a sauce. What is the total amount of spices Wendy uses?

$\frac{7}{8}$ teaspoon



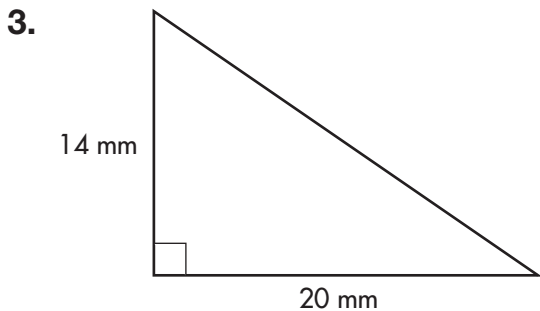
What is the area?

- A** 10 cm²
- B** 12 cm²
- C** 15 cm²
- D** 26 cm²



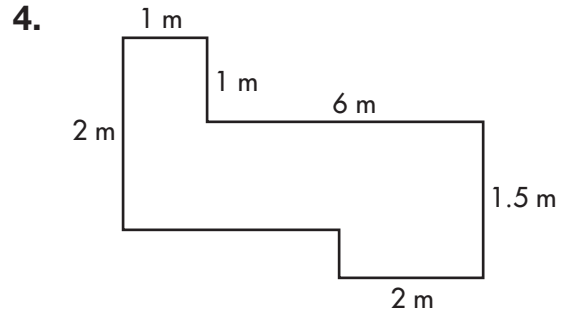
What is the volume?

- A** 1,800,000 ft³
- B** 42,000 ft³
- C** 3,000 ft³
- D** 240 ft³



What is the area?

- A** 60 mm²
- B** 140 mm²
- C** 280 mm²
- D** 560 mm²

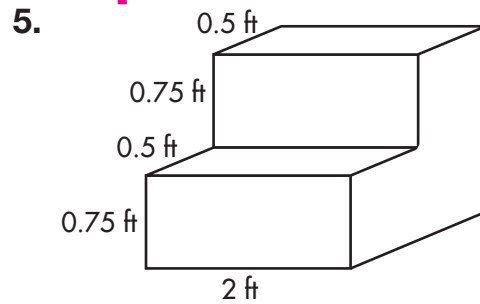


The drawing above shows the plans for a reflecting pool. What is the area of the pool?

9 m²

It will cost \$15 per square meter to cover the bottom of the pool with tile. What will the total cost be?

9 m² × \$15 per sq m = \$135



What is the volume of the figure?

2.25 ft³

1. The drawing shows two page numbers near the beginning of a 500-page book.

2	3
---	---

Which of the following page numbers will be a right-hand page?

- A** 433
B 318
C 240
D 134
2. Tameka needs the packing box with the greatest volume.

Measurements of Packing Boxes

	Length (in.)	Width (in.)	Height (in.)
Book box	15	13	12
Lamp box	14	14	14
Pillow box	18	12	5
Sweater box	16	15	6

Which box should Tameka choose?

- A** Book box
B Lamp box
C Pillow box
D Sweater box
3. Kayla draws a shape with 4 sides. Only 1 pair of opposite sides is parallel. Which is the best name for the shape?
- A** Parallelogram
B Rectangle
C Rhombus
D Trapezoid

4. The table shows the hat sizes of four people.

	Charlie	Larry	Tom	Earl
Hat Size	$6\frac{7}{8}$	$7\frac{5}{8}$	$6\frac{3}{4}$	$7\frac{1}{4}$

Which person wears the second-largest hat?

Earl

5. The White House in Washington, D.C., is $\frac{28}{1,000}$ square miles in area. Write this area as a decimal.

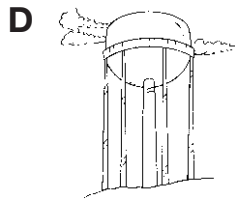
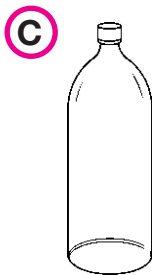
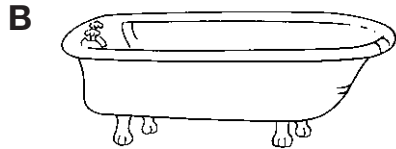
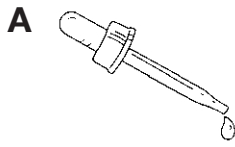
0.028

6. The area of a \$1 bill is 104 cm^2 . Estimate the number of \$1 bills you would need to cover a tabletop that is $2,612 \text{ cm}^2$ in area.

Possible answer:

26 ($2,600 \div 100$)

1. Which container is most likely to hold 16 fluid ounces of water?



2. Michiko lays 4 tiles in a row.



The 5th tile in the row should be a reflection of the 4th tile over a vertical line. Which shows the 5th tile?



3. The gas tanks in Tom's car and Megan's car each hold the same amount of gasoline. Tom's car has used $\frac{2}{3}$ of a tank. Megan's car has used $\frac{3}{5}$ of a tank.

a. Which car has used more gasoline?

Tom's car

b. How much more has that car used?

$\frac{1}{15}$ of a tank more

4. Nan pays \$112 for 16 exercise classes. Each class costs the same amount. What is the price of one class?

\$7

5. An elevator rises from 15.45 feet above the ground to 108.09 feet above the ground. What distance did the elevator rise?

92.64 feet

6. A office tower is built in the shape of a hexagon. How many sides does the building have?

6

1. Jana uses 2 liters of water to do a task. Which is most likely Jana's task?

- A Fill her bathtub
- B Water her lawn
- C Wash a load of clothes
- D** Make a pitcher of lemonade

2. Selena jumps $13\frac{1}{2}$ feet in a long jump. Which shows this distance written as an improper fraction?

- A $\frac{13}{2}$
- B $\frac{14}{2}$
- C** $\frac{27}{2}$
- D $\frac{28}{2}$

3. The table shows the fabric Mr. Wills needs to make robes for a school choir.

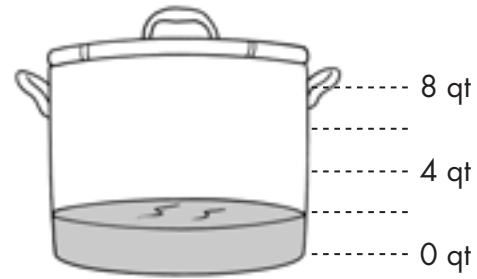
Fabric Needed for Choir Robes

Robes	5	10	15	20
Fabric (yards)	15	30	45	60

Which equation could he use to find the number of yards of fabric, f , that he needs to make r choir robes?

- A** $f = 3r$
- B $f = 30r$
- C $f = r \div 3$
- D $f = r \div 30$

4. Derek cooks this pot of soup.



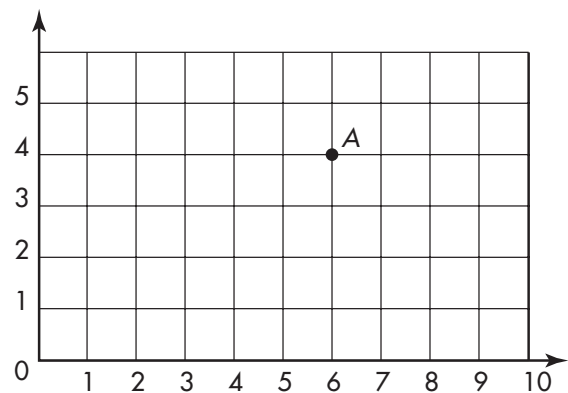
How many *gallons* of soup did Derek cook?

$\frac{1}{2}$ gallon

5. There are 5 people in the Walker family. They need two tents to have room for everyone on a camping trip. One tent holds $\frac{3}{5}$ of the family. What fraction of the family stays in the other tent?

$\frac{2}{5}$

6. What are the coordinates of point A?



(6, 4)

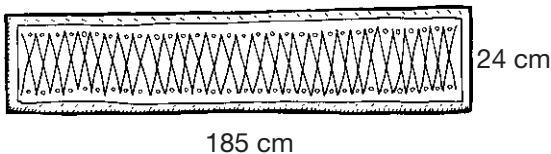
1. Which is most likely to weigh 7.5 ounces?

A Cell phone
B Dollar bill
C House key
D Rubber band

2. A paper clip has a mass of about 2 grams. Which is the best estimate of the mass of 1,000 paper clips?

A 2 milligrams
B 2 kilograms
C 200 milligrams
D 200 kilograms

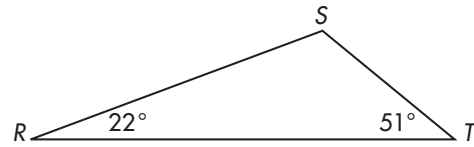
3. Aisha plans to put trim around all four edges of this scarf.



Which expression gives the number of centimeters of trim Aisha will need?

A 185×24
B $185 + 24$
C $\frac{1}{2} \times 185 \times 24$
D $(2 \times 185) + (2 \times 24)$

4. What is the measure of $\angle RST$?



107°

5. Ricky buys a shirt and a pair of boots. The boots cost \$38 more than the shirt. Let b be the cost of the boots. Write an expression that gives the cost of the shirt.

$b - 38$

6. A business owner makes 89 long-distance phone calls. His bill is \$1,784.23. Write and solve a number sentence to estimate c , the average cost of one long-distance call.

Possible answer:

$c \approx \$1,800 \div 90$

c is about \$20

Length	Weight	Capacity
1 foot = 12 inches (in.)	1 ton (T) = 2,000 pounds (lb)	1 gallon = 4 quarts (qt)
1 yard = 3 feet (ft) = 36 in.	1 lb = 16 ounces (oz)	1 qt = 2 pints (pt)
1 mile (mi) = 1,760 yd = 5,280 ft		1 pt = 2 cups (c)
		1 c = 8 fluid ounces (fl oz)

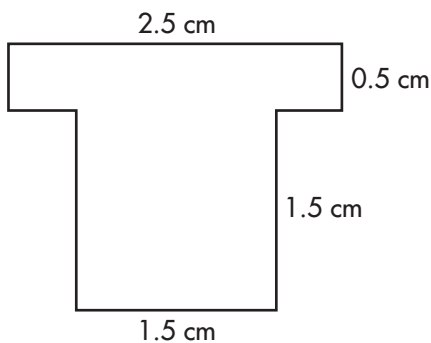
1. $3 \text{ mi} = ? \text{ ft}$

- A 15,840
 B 5,280
 C 1,296
 D 36

2. Celia is planning to make enough pudding to sell at her school's carnival. Which expression can she use to find how many cups of milk are in 12 gallons?

- A (12×2)
 B $(12 \times 2) \times 2$
 C $(12 \times 4) \times 2$
 D $(12 \times 4) \times 4$

3. What is the surface area of the figure?



- A 4.5 cm^2
 B 3.5 cm^2
 C 2.25 cm^2
 D 1.25 cm^2

4. While he had the flu, Christian's mom had him drink 272 fl oz of liquid. How many pints of liquid did Christian drink?

$$\frac{272 \text{ fluid ounces}}{\div 16 \text{ fl oz/pt}} = 17 \text{ pt of liquid}$$

How many gallons?

$$\frac{272 \text{ fluid ounces}}{\div 128 \text{ fl oz/gal}} = 2.125 \text{ gallons of liquid}$$

5. The Iditarod Trail Sled Dog Race
- [®]
- is run over 1,150 miles of land in Alaska. How many feet does the race cover?

$$1,150 \text{ miles} \times 5,280 \text{ feet/mile} = 6,072,000 \text{ feet}$$

Length	Capacity	Mass
1 cm = 10 mm	1 L = 1,000 mL	1 kg = 1,000 g
1 m = 100 cm		1 g = 1,000 mg
1 m = 1,000 mm		
1 km = 1,000 m		

1. Convert the measurement.

$$0.04 \text{ m} = ? \text{ cm}$$

- A** 0.0004
B 4
C 40
D 400
2. The wall that separates Jonas's house from his neighbor's is 4.5 meters long. How many kilometers long is the wall?
- A** 4,500 km
B 45 km
C 0.045 km
D 0.0045 km
3. Nick is packing his books into a box that is 12 inches wide, 18 inches long, and 15 inches tall. What is the volume of Nick's book box?
- A** 216 in³
B 270 in³
C 3,090 in³
D 3,240 in³

4. Jason's neighborhood has an emergency water tank with a capacity of 10,500 L. How many mL of water does the tank hold?

The tank holds

$$10,500 \text{ L} \times 1,000$$

$$\text{mL/L} = 10,500,000$$

mL of water.

5. In science class, Caroline's study group finds that the mass of a crystal they are classifying is 28.85 mg. What is the crystal's mass in grams?

$$28.85 \text{ mg} \div 1,000$$

$$\text{mg/g} = 0.02885$$

grams

A different crystal the group is studying has a mass of 0.00977 grams. What is this crystal's mass in milligrams?

$$0.00977 \text{ grams} \times$$

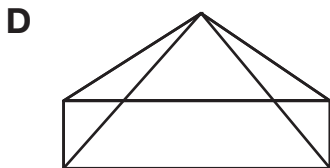
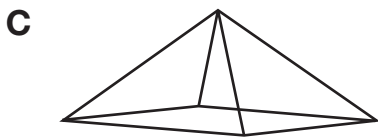
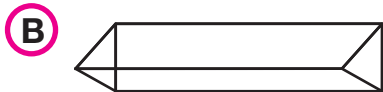
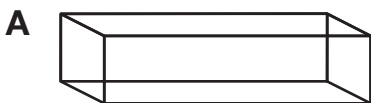
$$1,000 \text{ mg/g} = 9.77 \text{ mg}$$

- Shayla goes to watch a football game at 5:40 P.M. She leaves the game 2 hours and 35 minutes later. At what time does Shayla leave the game?
 - A 7:15 P.M.
 - B 7:40 P.M.
 - C 8:15 P.M.**
 - D 8:40 P.M.

- The drawing shows a pattern for making a box.



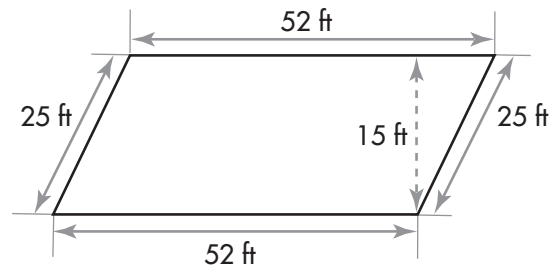
Marten uses the pattern to make a box. Which could be Marten's box?



- After-school events at Ranger Elementary have to end by 8:30 P.M. The school band plans a concert with 70 minutes of music. What is the latest time the band can start?

7:20 p.m

- Marti builds this patio in her backyard.



What is the area of Marti's patio?

780 ft²

- Rick and his mother catch 12 fish. Rick catches 4 fish. What fraction of the fish does Rick's mother catch? Write your answer in simplest form.

$\frac{2}{3}$

- Tori works the night shift at a hospital. She goes to work at 7:30 P.M. on Tuesday. When she leaves work, it is 5:15 A.M. on Wednesday. How long is Tori's shift?
 - 2 h 15 min
 - 9 h 45 min**
 - 10 h 15 min
 - 12 h 45 min
- A restaurant buys cooking oil in 5-gallon cans. How many cups of oil are in 1 can?
 - 80 cups**
 - 40 cups
 - 20 cups
 - 10 cups
- El Castillo* is a Mayan pyramid at Chichen Itzá, Mexico. It is 30 meters tall and 55 meters on each side of its square base. What is the perimeter of the base of *El Castillo*?
 - 170 meters
 - 220 meters**
 - 1,650 meters
 - 3,025 meters

- Ms. Sanchez goes on a business trip. She leaves at 9:50 A.M. on Monday and gets home at 3:15 P.M. on Thursday. How many days, hours, and minutes did Ms. Sanchez's trip take?

**3 days, 5 hours,
25 minutes**

- Jack, Kat, Lisa, and Micah are on a marathon relay team. The table shows which part of the marathon's 26 miles each person runs.

Name	Jack	Kat	Lisa	Micah
Miles	6	8	5	7

What fraction of the marathon does Jack run? Write your answer in simplest form. **$\frac{3}{13}$**

- What is the total fraction of the marathon that Kat and Micah run? Write your answer in simplest form. **$\frac{15}{26}$**

1. Longhorn Caverns is a group of caves in Burnet County, Texas. The air temperature inside the caves is 65°F . If the temperature outside is 102°F , how many degrees cooler is the air in the caves?
- A** 47°F
B 43°F
C 37°F
D 33°F
2. Ben joins a CD club. He pays \$10 for a year's membership. Then he must buy at least 1 CD each month. The CDs cost \$9 each. Which expression tells the amount Ben spends in 1 year?
- A** $9 + (10 \times 12)$
B $9 \times (10 + 12)$
C $10 + (9 \times 12)$
D $10 \times (9 + 12)$
3. Mr. Martinez used 744 minutes on his cell phone last month. Each call lasted an average of 4 minutes. How many calls did Mr. Martinez make?
- A** 740
B 344
C 186
D 111

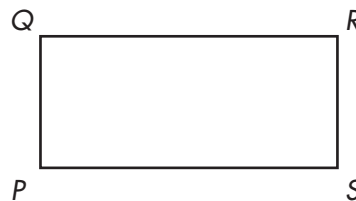
4. A scientist has a laboratory sample with a temperature of -20°C . By how many degrees will the scientist have to raise the sample's temperature to bring it to 5°C ?

25°C

5. On Tuesday, a stylist does 8 haircuts. He charges \$19.95 for each haircut. Estimate the total value of the stylist's work on Tuesday.

**Possible answer:
about \$160**

6. What is the measure of $\angle R$ in the rectangle below?

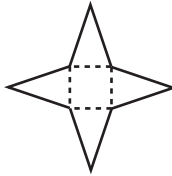


90°

1. José's school starts at 7:45 A.M. He eats lunch 3 hours and 55 minutes after school starts. What time does José eat lunch?

A 10:40 A.M.
 B 11:00 A.M.
 C 11:10 A.M.
D 11:40 A.M.

2. Crystal makes this pattern for a box. She folds the pattern on the dotted lines. What is the shape of Crystal's box?



- A Triangular prism
 B Rectangular prism
 C Triangular pyramid
D Rectangular pyramid
3. Which player's jersey has a prime number on it?



A Bloom
 B Durst
 C Johnson
 D Reyes

4. A schoolbook starts with the title page on page 1 and the table of contents on page 2. Chapter 1 begins on page 3. Each chapter is 6 pages long. After each chapter are 2 pages of review questions. The book has 8 chapters. What is the page number of the last page of chapter 4?

page 32

5. Mrs. Ryan reads this sign.

**Little Kids
 Daycare**

One child....\$125/week

Add \$30/week for each extra child

Mrs. Ryan sends her 3 children to Little Kids Daycare. How much does she pay for 4 weeks?

\$740

6. A farmer uses 60 pounds of bluebonnet seeds to plant an acre of bluebonnets. Each pound has about 14,500 seeds. About how many seeds does the farmer plant?

about 870,000

seeds

1. Use inverse equations and a property of equality to solve the equation.

$$t + 8 = 24$$

A $t = 192$

B $t = 32$

C $t = 16$

D $t = 3$

2. Leila and her friend Michael have been on the Lava Loops ride at Volcano Park a total of 36 times, though they have never ridden together. Michael has ridden it 12 times. Using v as the variable, how many times has Leila been on the ride?

A $v = 3$

B $v = 24$

C $v = 48$

D $v = 432$

3. $41 - (22 - 5) = ?$

A 58

B 24

C 17

D 14

4. On Monday, the Plumrose School cafeteria serves 257 meals. Of the students buying meals, 119 choose chicken à la king. The other students buy the Salisbury steak meal. Using s as the variable for Salisbury steak, write an equation for the situation.

$$119 + s = 257 \text{ or}$$

$$257 - 119 = s$$

How many students buy Salisbury steak?

138 students bought Salisbury steak

5. On Tuesday, the expression $t - h = 226$ represents the total number of meals sold in the cafeteria minus the number of hamburgers, leaving the number of pizza meals sold. If the cafeteria sold 198 hamburger meals on Tuesday, what is the total number of meals it sold on Tuesday?

$$t - 198 = 226;$$

$$\text{therefore, } t = 226 +$$

$$198 = 424 \text{ meals sold}$$

6. Solve each equation.

$$17 + y = 43$$

$$y = 26$$

$$a - 21 = 14$$

$$a = 35$$

$$45 = x - 15$$

$$x = 60$$

$$k + 63 = 105$$

$$k = 42$$

1. Use inverse operations and a property of equality to solve the equation.

$$7y = 84$$

- A** $y = 12$
B $y = 77$
C $y = 91$
D $y = 588$

2. Teresa has 72 stickers in her sticker collection. There are 8 stickers on each page of her album. Using the variable p , how many pages in her album contain stickers?

- A** $p = 576$
B $p = 80$
C $p = 64$
D $p = 9$

3. $48 - (23 + 15) = ?$

- A** 10
B 20
C 40
D 86

4. Massimo is a stock clerk at an office supply store. He is taking inventory of the highlighters. He uses the expression $\frac{h}{2} = 89$ to show that there are 89 packages of highlighters on the shelf, each package containing 2 highlighters. In all, how many highlighters are on the shelf?

$$\frac{h}{2} = 89; \text{ therefore,}$$

$$h = 89 \times 2 = 178$$

highlighters in all.

Massimo counts 56 packages of pencils, each package containing 12 pencils. Use the variable p to make an equation; then solve for the number of pencils in the 56 packages.

The student can use either $p = 56 \times 12$ or $\frac{p}{12} = 56; p = 56 \times 12 = 672$ pencils

5. Solve each equation.

$$11c = 99 \quad \underline{\underline{c = 9}}$$

$$\frac{18}{h} = 6 \quad \underline{\underline{h = 3}}$$

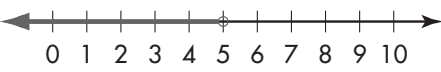
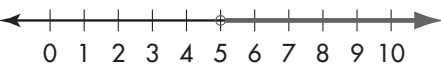
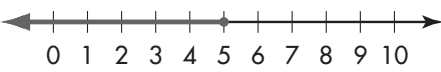
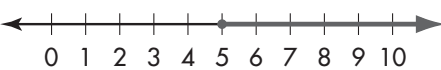
$$147 = 7x \quad \underline{\underline{x = 21}}$$

$$44 = \frac{132}{d} \quad \underline{\underline{d = 3}}$$

1. Choose the answer that shows three possible solutions to the inequality $k > 12$.

- A** $k = 12.5, k = 14, k = 20$
- B** $k = 12, k = 14, k = 15$
- C** $k = 9.5, k = 10, k = 12$
- D** $k = 5, k = 9, k = 11$

2. Choose the answer that shows the inequality $w \leq 5$ correctly graphed on a number line.

- A** 
- B** 
- C** 
- D** 

3. Oscar begins his homework at 4:25 P.M. and finishes at 6:05 P.M. How much time has elapsed?

- A** 2 hours
- B** 1 hour 40 minutes
- C** 1 hour 30 minutes
- D** 30 minutes

4. Name three solutions for each inequality. Then graph each inequality on a number line.

$z < 9$



Solutions may include any number less than but not equal to 9.

$j + 4 \geq 10$



Solutions may include any number greater than or equal to 6.

$b + 7 > 14$



Solutions may include any number greater than but not equal to 7.

5. Anita plans on reading at least 3 chapters in her book Saturday before watching television. Use the variable c to represent the number of chapters. Write an inequality to express the number of chapters she will read.

$c \geq 3$

Graph the inequality for the number of chapters Anita will read on a number line.



1. Which equation is the correct one for the following table?

x	y
6	17
1	12
0	11
4	15

- A** $y = x + 11$
 B $y = x + 9$
 C $y = x + 5$
 D $y = x - 3$
2. Which equation will give the answer $y = 15$ when $x = 3$?
- A** $x \div y = 5$
 B $3x = y$
 C $5y = x$
 D $y \div 5 = x$
3. Find $46 - (32 - 13)$.
- A** 1
 B 14
 C 27
 D 36

4. Elizabeth and her two sisters are counting their shoes. If $s =$ the total number of shoes the three girls own, and $p =$ the number of pairs of shoes they have, write an equation that will solve for the total number of shoes they own altogether when you know the number of pairs.

a. $s = 2p$

- b. Solve the equation for $p = 29$.

$s = 2 \times 29 = 58$

shoes

- c. If the girls own 74 shoes altogether, how many pairs do they own?

$74 = 2p$; therefore,

$p = 74 \div 2 = 37$

pairs of shoes

5. Write the equation for the following table, and then find the missing values for x and y .

x	y
12	2
30	5
42	7
54	9
60	10

The correct

equation is

$y = x \div 6.$

1. In April and May, the Diving Club sold 114 cakes. In May, they sold 78 cakes. Which equation can be used to find how many cakes the Diving Club sold in April?

A $114 + a = 78$
B $78a = 114$
C $a + 78 = 114$
D $a \times 78 = 114$

2. Chance and Talin are setting out 90 chairs for the PTA meeting. They want to place 15 chairs in each row. Which equation can be used to find how many rows of chairs they will make?

A $r \times 15 = 90$
B $r - 90 = 15$
C $15r = 90$
D $90r = 15$

3. $(17 - 5) \div 4 + (15 \times 2) = ?$

A 29.25
B 33
C 36
D 42

4. Juego Amusements will run a mini-train at the El Toro School carnival. Each time it runs, 8 children will ride the train; there is also a driver. Write an equation using the variable c to show how many children will ride the train 9 trips. Solve.



$$c = 9 \times 8;$$

72 children

5. El Toro School is buying new furniture for its cafeteria. The principal wants to seat all the students eating in the cafeteria, t , at 20 tables, with 16 students at each table. Write an equation to show how many students in all will be able to eat in the cafeteria at the same time. Solve.

$$t = 20 \times 16;$$

320 students

1. Which of the following is the simplest form of the ratio $\frac{16}{40}$?

A $\frac{4}{5}$

B $\frac{8}{20}$

C $\frac{2}{5}$

D $\frac{4}{10}$

2. In her bookcase, Catherine counts 15 biographies, 12 nonfiction books about animals, and 18 science-fiction books. What is the ratio of biographies to science-fiction books?

A $\frac{2}{3}$

B $\frac{4}{6}$

C $\frac{4}{5}$

D $\frac{5}{6}$

3. Which shows a ratio that is equal to 4:12?

A 2:10

B 4:16

C 8:24

D 12:48

4. Napa asked all the kids in the fifth grade which continent they would like to visit. The results are in the table.

Asia	14
North America	18
South America	12
Europe	32
Africa	22

- a. What is the ratio of kids who want to visit Europe to all the kids who answered Napa's question?

Simplify. $\frac{32}{98} = \frac{16}{49}$

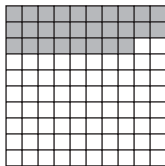
- b. What is the ratio of kids who want to visit Asia to kids who want to visit Africa? Simplify. Then write two other ratios that are equal to that ratio.

$\frac{14}{22} = \frac{7}{11}$; Possible answers: $\frac{21}{33}$ or $\frac{28}{44}$

5. Write each ratio in simplest form.

$\frac{36}{99} = \frac{4}{11}$ $\frac{25}{100} = \frac{1}{4}$
 $\frac{48}{69} = \frac{16}{23}$

1. Choose the percent that is represented by the shaded part of the 100-grid.



- A 25%
B 28%
 C 38%
 D 72%
2. Of the 100 treats on the table for the fifth-grade bake sale, 65 contain chocolate. There are 37 that contain peanut butter. What percent of the bake sale treats do not contain chocolate?
- A 65%
 B 63%
 C 37%
D 35%
3. $26.78 > ?$
- A 26.69**
 B 26.8
 C 27.00
 D 27.1

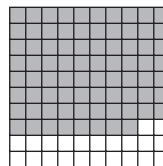
4. Of the 100 fans cheering in the bleachers, 57 are waving orange flags, and 43 have purple flags. Give the ratio of the fans with purple flags to all the fans.

$\frac{43}{100}$ fans are waving purple flags.

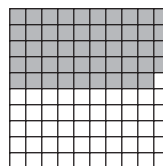
5. What percent of the fans are waving orange flags?

57% are waving orange flags.

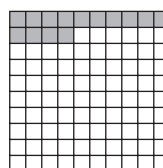
6. Write the ratio and percent represented by the shaded part of each 100-grid.



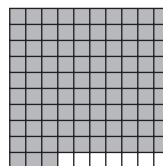
$\frac{78}{100}$, 78%



$\frac{49}{100}$, 49%



$\frac{14}{100}$, 14%



$\frac{93}{100}$, 93%

1. Which answer shows the percent in decimal form?

7%

- A** 7.0
B 0.7
C 0.07
D 0.007
2. Dario knows that $\frac{9}{10}$ of the houses on his cul-de-sac have two stories. What percent of the houses have two stories?
- A** 0.9%
B 9%
C 90%
D 900%
3. Which answer shows the numbers in the correct order, from greatest to least?
- A** 66.3, 66.15, 62, 61.6
B 66.15, 66.3, 62, 61.6
C 66.3, 66.15, 61.6, 62
D 61.6, 62, 66.15, 66.3

4. Fill in the missing equivalent values.

Percent	125%	76%	9%	55%
Fraction	$1\frac{1}{4}$	$\frac{19}{25}$	$\frac{9}{100}$	$\frac{11}{20}$
Decimal	1.25	0.76	0.09	0.55

5. Hannah and Jason are playing "Rock, Paper, Scissors." Hannah uses the sign for scissors 9 out of the 15 times they play. What percent of the times does she use the sign for scissors?

$$\frac{9}{15} = 60\% \text{ of the time}$$

6. Write the decimal that represents the number of times she uses the sign for scissors.

$$60\% = 0.60 \text{ or } 0.6$$

7. Write each percent as a decimal and as a fraction in simplest form.

$$\begin{array}{l} 2\% \quad \underline{0.02, \frac{1}{50}} \\ 16\% \quad \underline{0.16, \frac{4}{25}} \\ 75\% \quad \underline{0.75, \frac{3}{4}} \\ 150\% \quad \underline{1.50, 1\frac{1}{2}} \end{array}$$

- Find 5% of 150.
 A 750
 B 75
C 7.5
 D 0.75
- Mikel's first airplane flight is 668 miles. The airplane is over the ocean for 75% of the trip. For how many miles is the airplane over the ocean?
 A 50.1 miles
 B 52.02 miles
C 501 miles
 D 520.2 miles
- $58.27 < ?$
A 58.4
 B 58.19
 C 57.35
 D 57.1

- Best Burgers receives a shipment of burgers and cheese slices that weighs 1,290 pounds. The cheese slices make up 40% of that weight. How much do the cheese slices weigh?

The cheese slices weigh $1,290 \times 0.40 = 516$ pounds.

- There are two different types of cheese slices, Monterey Jack and American. If 25% of the cheese slices are Monterey Jack, how many pounds of Monterey Jack cheese slices are there?

$516 \times 0.25 = 129$ pounds

- Find the percent of each number.

18% of 350	<u>63</u>
56% of 95	<u>53.2</u>
35% of 18	<u>6.3</u>
12% of 400	<u>48</u>
60% of 60	<u>36</u>

1. The number of cats and dogs in the animal shelter is shown below. What is the percent of cats in the shelter?

	Number	Percent
Cats	12	?
Dogs	13	52

- A 12%
 B 36%
C 48%
 D 60%
2. A waitress served 80 customers in one evening shift. Sixteen of her customers ordered the buffet. What percent of her customers ordered the buffet?

$$\frac{16}{80} = ?\%$$

- A 80%
B 20%
 C 16%
 D 2%
3. Which number belongs in the empty box in the table, if the numbers are ordered from least to greatest?

1.25	?	1.50	1.55
------	---	------	------

- A 0.27
 B 0.45
 C 1.22
D 1.4

4. Shonda and Romey are playing a math game called Moneytown. The table below shows how many times, out of 30 turns around the board, Shonda has landed on the Giant Bank and Deposit spaces.

Giant Bank	$\frac{9}{30}$	$\frac{?}{?}$	$\frac{?}{100}$
Deposit	$\frac{6}{30}$	$\frac{1}{?}$	$\frac{?}{100}$

- a. Fill in the missing numbers in the table.

Giant Bank	$\frac{9}{30}$	$\frac{3}{10}$	$\frac{30}{100}$
Deposit	$\frac{6}{30}$	$\frac{1}{5}$	$\frac{20}{100}$

- b. What percent of her turns around the board did Shonda land on Giant Bank? What is the ratio, in simplest form, of the number of times she landed on Giant Bank to the number of times she landed on Deposit?

30%; $\frac{3}{2}$ or 3:2

5. Katerina borrowed \$75 from her brother. So far, she has paid him \$30. Fill in the table to find what percent she has paid of the money she owes.

\$30	6	2	40
\$75	15	5	100

Katerina has paid 40%.

1. Which integer could be used for the following description?
a parking lot two levels underground

A -2
B $1 - 2$
C $2-$
D 2

2. Carl has \$36 in his checking account. He writes two checks, one for \$17 and one for \$22. After the money to cover the two checks is taken out of his bank account, what will Carl's bank account balance be?

A \$19
B \$3
C $-\$3$
D $-\$19$

3. $\frac{5}{8} < ?$

A $\frac{5}{9}$
B 0.6
C $\frac{3}{5}$
D 0.63

4. A good storage temperature for ice cream is -18°C . When you are ready to serve the ice cream, you should raise the temperature by 6° . At what temperature should you serve ice cream?

$$\underline{-18^{\circ} + 6^{\circ} = -12^{\circ}\text{C}}$$

5. Most frozen vegetables are safely stored at 0°C . French fried potatoes are best stored at a temperature that is 39° lower. At what temperature are French fried potatoes best stored?

$$\underline{0^{\circ} - 39^{\circ} = -39^{\circ}\text{C}}$$

6. Write an integer for each of the following descriptions.

346 feet below sea level

$$\underline{-346}$$

a 72-foot drop on a roller coaster

$$\underline{-72}$$

a rise in temperature from 99° to 102°

$$\underline{+3^{\circ}}$$

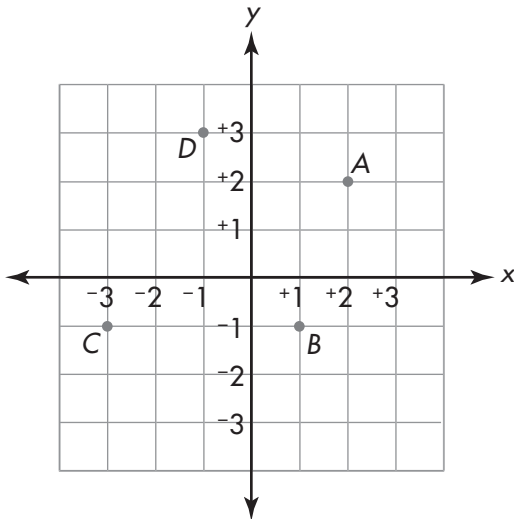
a tunnel 3 floors below the ground

$$\underline{-3}$$

a bank deposit of \$38

$$\underline{+38}$$

Use the grid below to answer questions 1 and 2.



1. Which point is found at $(-1, 3)$?

- A A
- B B
- C C
- D D**

2. Which point is found at $(1, -1)$?

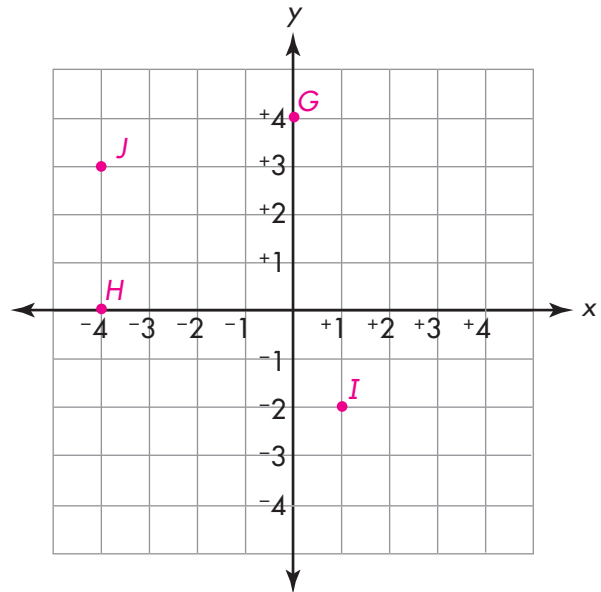
- A A
- B B**
- C C
- D D

3. Zhou and her dad are shopping for sod. Their lawn is 21 feet long and 14 feet wide. Use the formula for area to determine how many square feet of sod are needed to cover the lawn and then choose the correct answer.

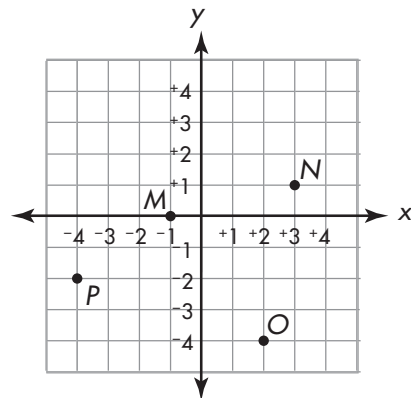
- A 294 ft²**
- B 274 ft²
- C 42 ft²
- D 35 ft²

4. Graph and label each of the following points on the grid.

- G (0, 4) H (-4, 0)
I (1, -2) J (-4, 3)



5. Write the ordered pair for each point on the grid pictured below.



- M **(-1, 0)** N **(3, 1)**
O **(2, -4)** P **(-4, -2)**

1. What is the distance between the integers -3 and $+6$ on a number line?

A 3
 B 6
C 9
 D 18

2. Find the distance between the points named in these ordered pairs on the coordinate plane: $(+2, -1)$ and $(-3, -1)$.

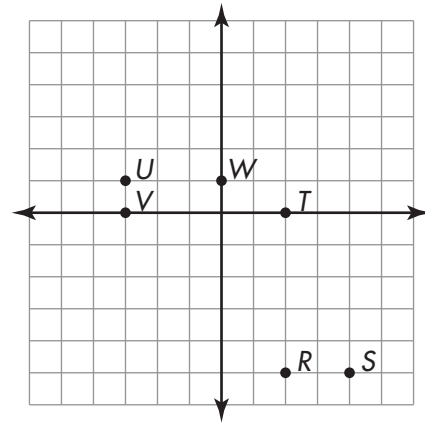
A 5
 B 2
 C 1
 D 0

3. While playing a board game, Silvia lands on the “Lose 1 Turn” space 3 times out of 20 turns around the board. What percent of her turns does she land on that space?

A 10%
B 15%
 C 25%
 D 30%

4. Lina walks 8 blocks due east from the intersection of Park Avenue and Beach Street. Sofia walks 4 blocks due west from the same intersection. When they stop walking, how many blocks are between Lina and Sofia?

There are $8 + 4 = 12$ blocks between Lina and Sofia.



Use the coordinate plane above for 5 through 7.

5. What is the distance between point R and point T ?

5 units

6. Which two points are exactly 3 units apart?

Points U and W

7. Which is greater, the distance between points U and W or the distance between points R and S ?

The distance between points R and S is 2 units, which is 1 unit less than the distance between points U and W .

1. Marta, Nina, Oscar, and Pilar share a pizza. The table shows what fraction of the pizza each person ate.

How Much Pizza Each Friend Ate

Person	Marta	Nina	Oscar	Pilar
Fraction of Pizza	$\frac{2}{12}$	$\frac{2}{12}$	$\frac{3}{12}$	$\frac{1}{12}$

What fraction of the pizza did they eat?

- A $\frac{1}{3}$
 B $\frac{1}{2}$
 C $\frac{2}{3}$
 D $\frac{3}{4}$
2. The world's largest tracked vehicles are the transporter-crawlers NASA uses to carry the Space Shuttle to the launch pad. The crawlers can travel less than $\frac{7}{1,000}$ miles on 1 gallon of fuel. What is this fraction written as a decimal?

- A 0.7
 B 0.07
 C 0.007
 D 0.0007

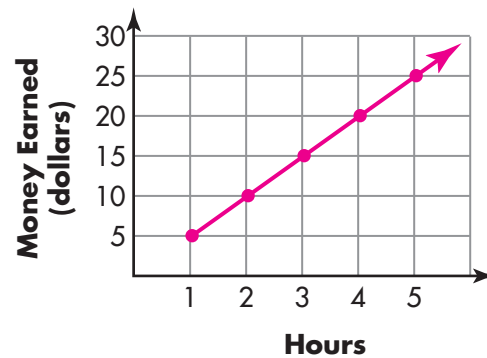
3. Ana earns \$5 for an hour of babysitting.
 a. Write an equation to show the amount of money m Ana earns for h hours of babysitting.

$m = 5h$

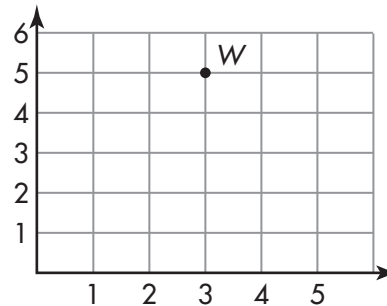
- b. Use your equation to fill in the table.

h	1	2	3	4	5	6
m	5	10	15	20	25	30

- c. Use the values in the table to graph the equation.



4. What are the coordinates of point W ?



(3, 5)

1. Use the number line to solve the problem by working backward.



Cherylanne has been delivering gifts to some friends in her apartment building. She ended up on the 2nd floor after going up 3 floors. Before that, she had come down 5 floors. On what floor did Cherylanne start?

- A** 4th
B 3rd
C 1st
D G (ground floor)
2. The Perez family arrived at Tia Elena's house with 6 gallons of gas. Along the way, they first used 8 gallons and then added 10 gallons; then they used 5 gallons. How many gallons of gas did the Perez family start with? Work backward, and then solve.
- A** 3 gallons
B 7 gallons
C 9 gallons
D 11 gallons

3. Ginny gets out of school at 3:50 P.M. After her lunch period ends, she spends 45 minutes in math class, 60 minutes in advanced creative writing, and 40 minutes in industrial arts. At what time does her lunch period end? Work backward to solve, and then check your answer.

1:25 P.M.

4. The expression $(5 + d) - b$ represents the number of times Kent will have gone diving with his uncle by the end of the year. Evaluate this expression if $d = 12$ and $b = 2$.

$$(5 + 12) - 2 =$$

$$17 - 2 = 15$$

5. Alejandra is continuing a dice game she started playing with her cousin yesterday. Her score at the end of today's game is 135. When she started today's game, she first won 15 points. Then she lost 10, won 25, won 30, and lost 20. How many points did she have at the beginning of today's game?

95 points

1. Sondra does a survey to find out how the students in her class get to school. The frequency table shows the results.

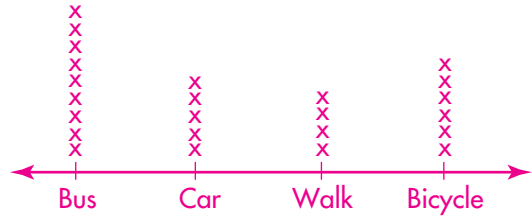
How Students Get To School

Ways to Get to School	Number
Bus	9
Car	5
Walk	4
Bicycle	6

In which way does the second-greatest number of students get to school?

- A Bus
 - B Car
 - C Walk
 - D Bicycle**
2. Kyle fills a pot of water. The temperature of the water is 95°F. Water boils at 212°F. By how many degrees must Kyle increase the water's temperature if he wants it to boil?
- A 107°F
 - B 117°F**
 - C 127°F
 - D 307°F
3. Kyra plots point X at (5, 9). Then she moves 3 units to the left and 6 units up and plots point Y. What are the coordinates of point Y?
- A (2, 3)
 - B (2, 15)**
 - C (8, 3)
 - D (8, 15)

4. a. Make a line plot of the data in Sondra's survey from problem 1.



- b. In which way do the least number of students get to school?

Walk

5. A set of 9 books has 5,487 pages. Estimate the average number of pages in each book.

**Possible answer:
about 600 pages
(5,400 ÷ 9 = 600)**

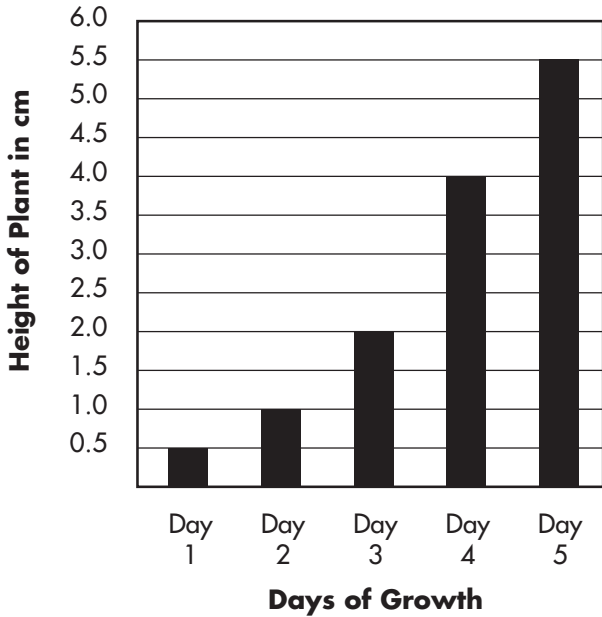
6. The table shows the heights of four Texas mountain peaks.

Name	Height (feet)
Bartlett Peak	8,508
Bush Mountain	8,631
Guadalupe Peak	8,749
Shumard Peak	8,615

Which is tallest?





Guadalupe Peak

Use the bar graph to answer 1 and 2.



- What interval was used for the scale?
 A 0.5 cm C 5 cm
 B 1 cm D 5.5 cm
- How many centimeters did the plant grow between Day 3 and Day 5?
 A 5.5 cm C 3.5 cm
 B 4 cm D 1.5 cm
- Catalina started hiking at 359 feet above sea level. At the end of her journey, she was at 210 feet above sea level. Which integer describes her trip in terms of elevation?
 A 569 feet
 B 149 feet
 C -149 feet
 D -569 feet

4. Ed's Auto Sales

Month	Number of Cars Sold
June	
July	
August	
September	

Key:  = 10 cars

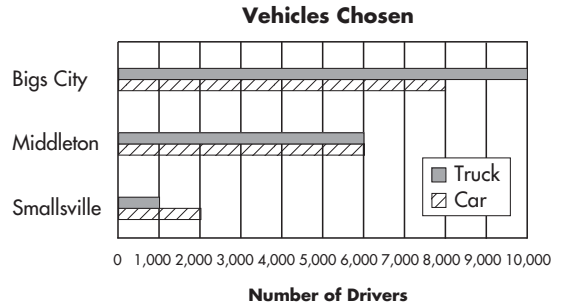
How many cars did Ed sell in July?

35 cars

In which month did Ed sell the most cars? In which month did he sell the fewest?

Most: September
Fewest: August

5.



In all, how many more trucks were chosen than cars?

1,000 trucks

How many residents in the two biggest towns chose cars?

14,000 residents

1. Marda and Anna are raking their yard. Marda has raked $\frac{4}{9}$ of the yard. Anna has raked $\frac{2}{9}$ of the yard. What fraction shows the total amount of the yard the girls have raked?

A $\frac{1}{3}$
 B $\frac{1}{2}$
 C $\frac{2}{3}$
 D $\frac{8}{9}$

2. Students sell school pins to raise money for a class trip. They sell 37 pins and raise \$148. What is the price of each pin?

A \$4
 B \$7
 C \$11
 D \$14

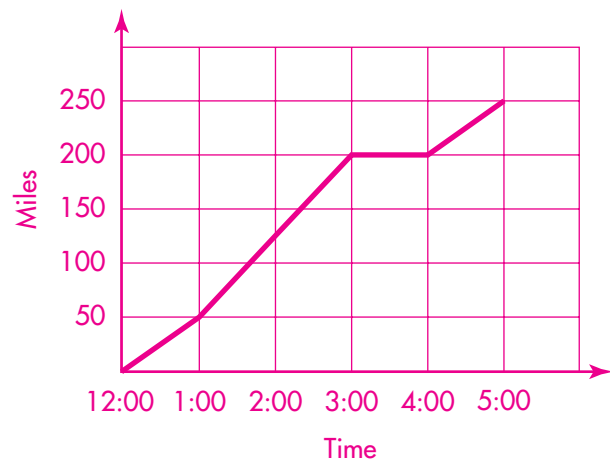
3. Mr. Kay's cell phone comes with 450 minutes. He makes three 91-minute calls and two 64-minute calls. How many minutes does Mr. Kay have left?

A 295 minutes
 B 177 minutes
 C 76 minutes
 D 49 minutes

4. Monica starts at noon and drives for 5 hours. The table shows the total number of miles she has gone.

Time	Total Miles
12:00	0
1:00	50
2:00	125
3:00	200
4:00	200
5:00	250

- a. Make a line graph of the table data.



- b. When did Monica stop for an hour to get a snack and rest?

3:00

5. Ms. Marcus saw an 8-foot board into 2 pieces. One piece is 3.625 feet long. What is the length of the other piece?

4.375 feet

Use the stem-and-leaf plot below to answer **1** and **2**.

Years Worked by Employees of the WAG Company

Stem	Leaf
0	1 2 2 3 5 6 7
1	0 1 2 2 4 4 6
2	9

KEY: 1|2 = 12

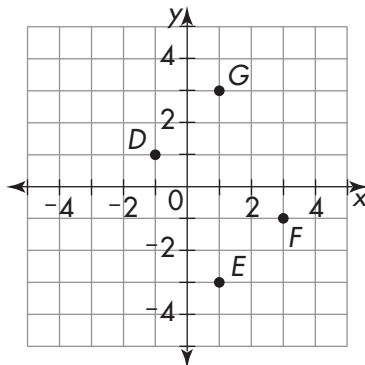
1. What is the fewest number of years worked by an employee of the WAG Company?

- A 0
- B 1**
- C 2
- D 10

2. How many employees have worked at the WAG Company for 10 years or more?

- A 10
- B 9
- C 8**
- D 7

3.



Which point is found at (+3, -1)?

- A D
- B E
- C F**
- D G

4. The stem-and-leaf plot below shows how many minutes it took Ms. Bean's students to complete a math test.

Time to Complete Test (min.)

Stem	Leaf
1	8 9 9
2	0 0 3 4 7 7 7
3	1 1 4 5 5 6 7 8
4	1 2

KEY: 1|8 = 18

Which amount of time occurs most often?

27 minutes

What is the greatest number of minutes a student took to complete the test?

42 minutes

5. Make a stem-and-leaf plot of the data.

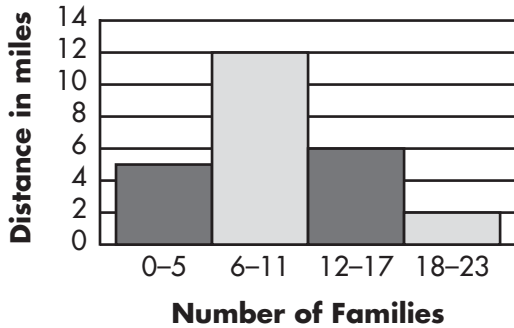
Ages (in years) of Adam's Family Members

3	11	7
36	38	58
61	10	5

Stem	Leaf
0	3 5 7
1	0 1
3	6 8
5	8
6	1

The histogram below shows how many miles from school the families on Yoville School Bus Route #3 live.

How Far From School Families Live



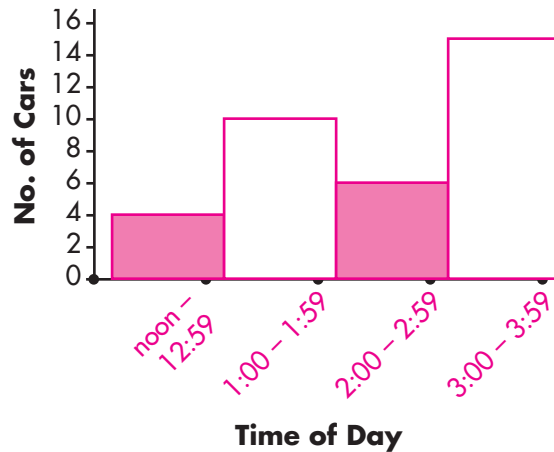
- How many miles from the school is the group of families that represents $\frac{1}{5}$ of the number of families on the route?
 - A 18–23 miles from the school
 - B 12–17 miles from the school
 - C 6–11 miles from the school
 - D** 0–5 miles from the school
- If two more families move to a neighborhood that is 15 miles from the school, how many families will be in their group?
 - A 4
 - B 7
 - C** 8
 - D 14
- What is the mode?

{2, 3, 7, 1, 7}

 - A** 7
 - B 3
 - C 2
 - D 1

Time of day	Number of cars
noon–12:59 P.M.	4
1:00–1:59 P.M.	11
2:00–2:59 P.M.	6
3:00–3:59 P.M.	15

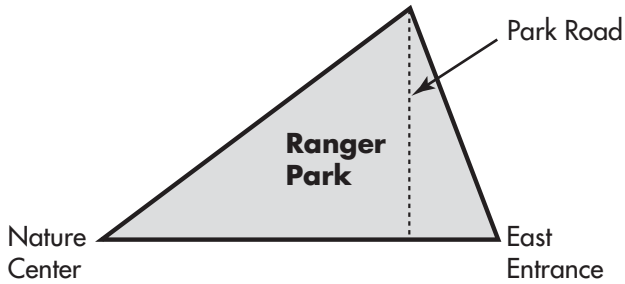
- The table above shows the number of cars in the Pet Shoppe parking lot at different times of the day. Complete the histogram below by labeling the horizontal axis and drawing the bars.



- During which hour of the day could you find $\frac{1}{6}$ of the total number of cars that parked in the Pet Shoppe parking lot all day?

**Between
2 and 2:59 P.M.**

1. The map shows Ranger Park.



The Park Road is 6 kilometers long. The distance from the East Entrance to the Nature Center is 8 kilometers. What is the area of Ranger Park?

- A 7 km²
- B 14 km²
- C 24 km²**
- D 48 km²

2. Pedro cut a rope 1,050 millimeters long. What is the length of the rope in centimeters?

- A 10.5 cm
- B 105 cm**
- C 10,500 cm
- D 1,050,000 cm

3. The floor of Latisha's room is a quadrilateral. Which must be true about the floor?

- A It has 4 sides.**
- B It has 4 right angles.
- C It has 1 pair of parallel sides.
- D It has 2 pairs of parallel sides.

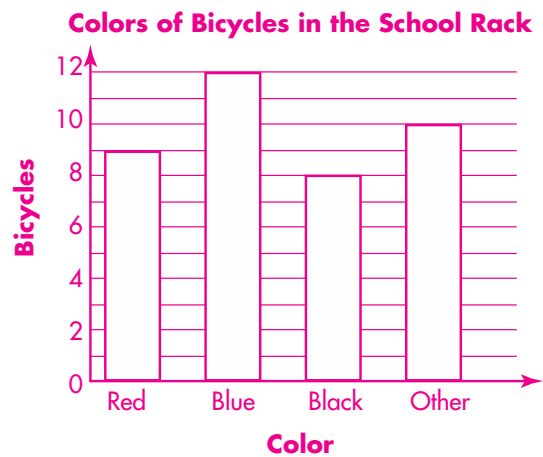
4. Jennifer counted the number of bicycles in the rack at her school. Then she made this table.

Color	Red	Blue	Black	Other
Bikes	9	12	8	10

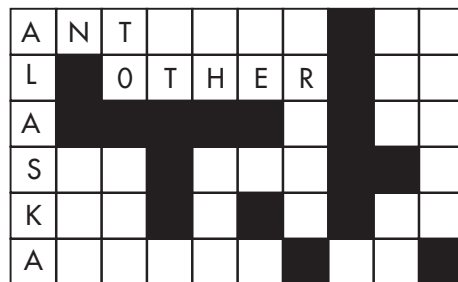
a. Would a line graph or bar graph be more appropriate to display this data?

bar graph

b. Make the graph you chose in part a.



5. Kim works on a crossword puzzle.



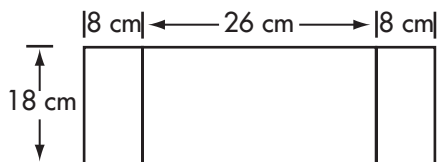
What fraction of the white squares has Kim filled in?

13/43

1. Each person in a high-jump contest gets three jumps. Juanita jumps 46 in., 48 in., and 53 in. What is the mean height of Juanita's jumps?

A 53 in.
 B 50 in.
 C 49 in.
 D 48 in.

2. The drawing shows the measurements of a book jacket.



Which expression gives the area of the book jacket?

- A $26 \times 8 \times 18$
 B $18 \times (8 + 26 + 8)$
 C $(8 \times 18) + (8 \times 26)$
 D $2 \times (8 + 26 + 8) + (2 \times 18)$

3. Tara writes down the amount she earns each week from babysitting.

Week	Amount
1	\$35
2	\$30
3	\$35
4	\$35

- a. What is the mean amount of Tara's earnings for weeks 1–4?

\$33.75

- b. In week 5, Tara does not earn any money. Will this change her mean earnings? How?

Yes: the mean

goes down

to \$27.

4. A scout troop collected \$144 for an animal shelter. The table shows how much money 4 of the scouts collected.

Name	Amount
Barb	\$18
Carina	\$36
Marie	\$24
Nita	\$12

Which scout collected $\frac{1}{4}$ of the total amount?

Carina

1. The table shows the population of five counties in Central Texas in the year 2000.

Population of Central Texas Counties, 2000

County	Population
Bastrop	61,724
Burnet	34,147
Hays	115,030
Travis	866,349
Williamson	328,421

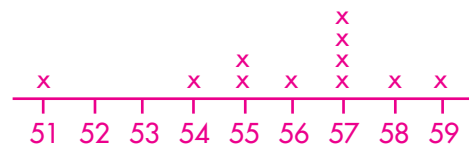
What is the range of the data?

- A 115,030
 - B 266,697
 - C 832,202**
 - D 866,349
2. Emma’s basketball team won 4 games more than Nina’s team did. Let n be the number of games Nina’s team won. Which expression gives the number of games Emma’s team won?
- A $n - 4$
 - B $4 - n$
 - C $n + 4$**
 - D $4 \div n$

3. The table shows the heights of the members of a soccer team.

Name	Height (inches)	Name	Height (inches)
Trini	56	Letty	54
Keisha	59	Taylor	55
Angela	55	Kelsey	57
Nisha	51	Val	58
Maria	57	Becky	57
Dafna	57		

- a. Make a line plot of the data.



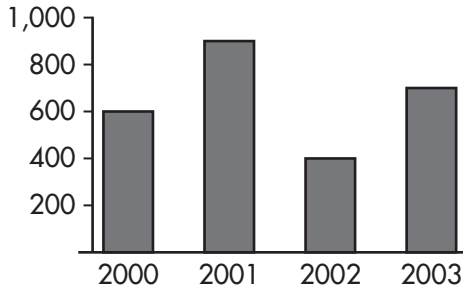
- b. How many members of the team are greater than 55 inches tall?

7

4. In the year 2000, the median value of a house in El Paso, Texas, was \$71,300. Write a list of five numbers that has a median of 71,300.

any list of values that, when written in ascending order, has 71,300 as the middle value

1. Use the bar graph to answer the question.

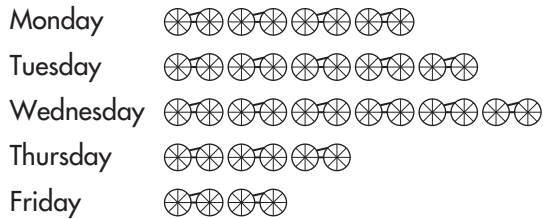


How many snow boots were sold by the Yeti Company in 2002?

- A 400
- B 600
- C 700
- D 900

2. Use the picture graph to answer the question.

Greenhouse School Bicycle Rack



= 2 bicycles

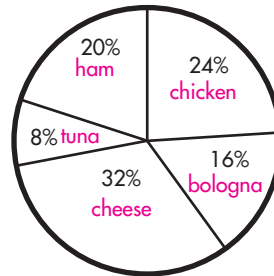
On which weekday were there 6 bicycles in the bicycle rack?

- A Wednesday
- B Monday
- C Thursday
- D Friday

3. The table shows the kind of sandwich preferred by 25 students who were asked.

Cheese	Chicken	Ham	Tuna	Bologna
8	6	5	2	4

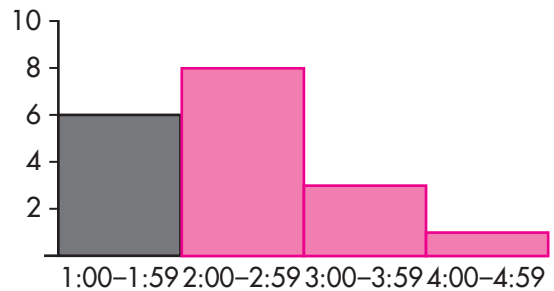
Use the information to complete the circle graph below.



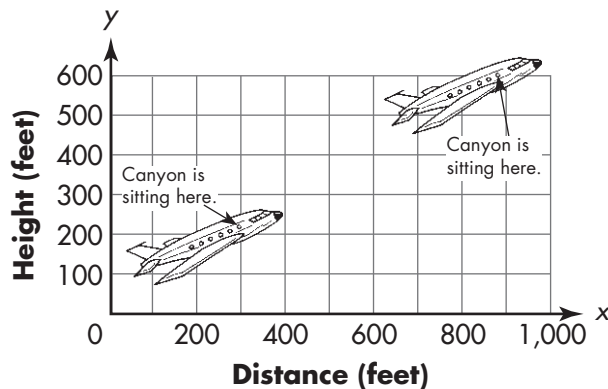
4. Tanya spent a Sunday afternoon counting squirrels in her yard.

1:00–1:59 P.M.	6
2:00–2:59 P.M.	8
3:00–3:59 P.M.	3
4:00–4:59 P.M.	1

Use the information in the table to complete the histogram.



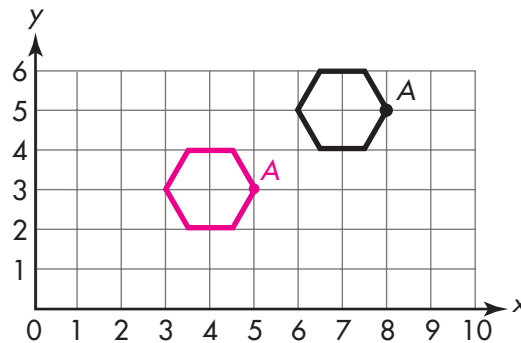
1. Canyon rides in an airplane. The drawing shows the plane taking off.



Which describes the change in Canyon's position?

- A 300 feet to the right and 200 feet up
 - B 400 feet to the right and 600 feet up
 - C** 600 feet to the right and 400 feet up
 - D 900 feet to the right and 600 feet up
2. Hector draws a square on a coordinate grid. One vertex is at (1, 3). Which could be the other three vertices?
- A (0, 0), (1, 1), (3, 3)
 - B** (1, 5), (3, 3), (3, 5)
 - C (1, 4), (1, 5), (3, 3)
 - D (2, 3), (3, 3), (4, 3)

3. The drawing shows point A is a vertex of a hexagon.



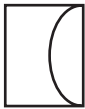
Draw the hexagon after a translation of 2 units down and 3 units to the left.

- a. What kind of polygon is the translated shape?
hexagon
- b. What are the coordinates of A before the translation?
(8, 5)
- c. What are the coordinates of A after the translation?
(5, 3)

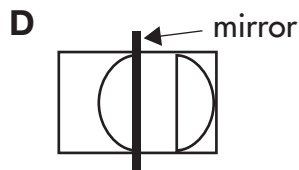
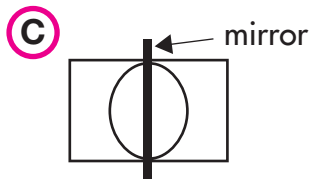
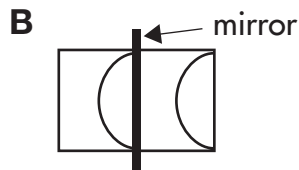
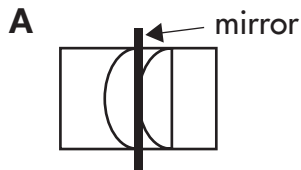
4. A sidewalk is 876 inches long. What is the length of the sidewalk in feet?

73 feet

1. Teresa draws a half circle.



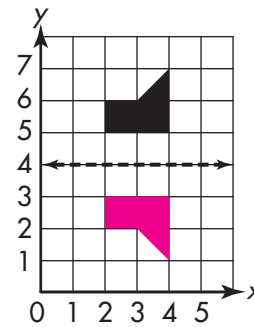
Which shows Teresa's drawing and its reflection in a mirror?



2. The estimated population of Texas in 2005 was 22,859,968. What is this population rounded to the nearest ten thousand?

- A 20,000,000
- B 22,859,970
- C 22,860,000**
- D 23,000,000

3. Draw the figure reflected over the line.



4. The table shows the number of problems Kim answers correctly on her weekly math quizzes.

Week	Correct Answers	Total Quiz Problems
1	5	6
2	7	10
3	11	15
4	4	5

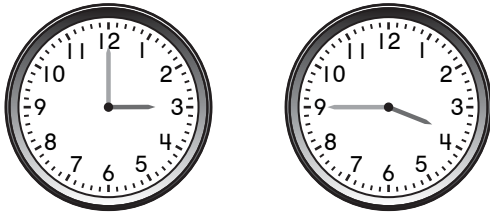
In which week did Kim correctly answer the greatest fraction of the quiz problems?

Week 1

5. A business makes an average of \$629 each day. What is the business's total average earnings for 54 days?

\$33,966

1. The drawing shows a clock at 3:00 P.M. and at 3:45 P.M.

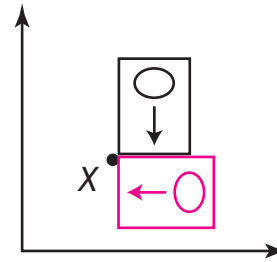


Which best describes the change in the position of the minute hand?

- A Rotation
 - B Reflection
 - C Translation
 - D Transportation
2. Each class at Gomez School gets 4 kickballs for students to use at recess. Which tells the number of kickballs needed for c classes?

- A $4c + 4$
- B $4c$
- C $\frac{c}{4} + 4$
- D $\frac{c}{4}$

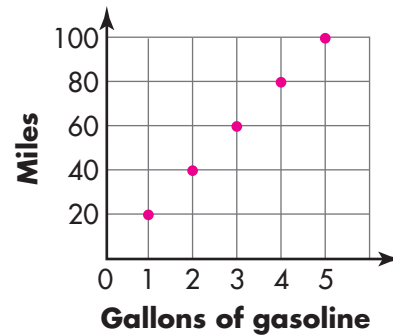
3. The drawing shows a sticker.



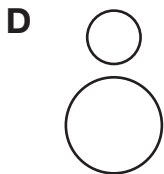
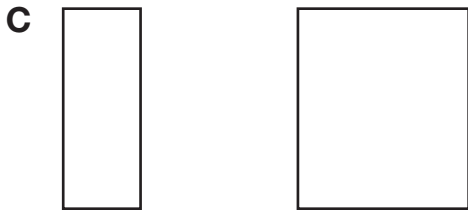
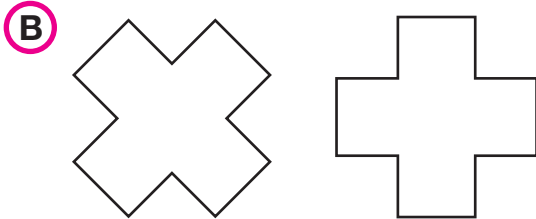
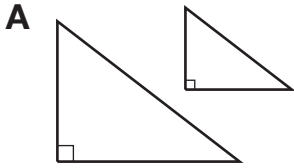
Rotate the sticker 90° clockwise around point X. Draw the result.

4. The table shows the gallons of gas Mr. Li's car uses. Display the data in the table on the coordinate grid.

Gas (gallons)	1	2	3	4	5
Miles	20	40	60	80	100



1. Maya draws a pair of congruent shapes. Which could be the shapes Maya draws?



2. Rebecca sits at her desk and draws a circle on a piece of paper. Which is a translation of the circle?

- A** Tear the paper in two pieces.
- B** Hold the paper up to a mirror.
- C** Draw a rectangle on the paper.
- D** Slide the paper across the desk.

3. Simon learns 7 new words each week. How many new words does Simon learn in 35 weeks?

- A** 42
- B** 50
- C** 215
- D** 245

4. The table shows the number of copies c a copy machine can make in m minutes.

Minutes m	Copies c
1	15
2	30
3	45
4	60
5	75

a. Write an equation that shows how to find the number of copies c the machine can make in m minutes.

$c = 15m$

b. Use the equation to find the number of copies the machine can make in 25 minutes.

375 copies

5. A rancher pays \$9,540 for 47 goats. Estimate the price of one goat.

about \$200

1.



How many lines of symmetry does the figure have?

- A 10
B 5
 C 1
 D 0

2.



What is the smallest turn that will rotate the triangle back onto itself?

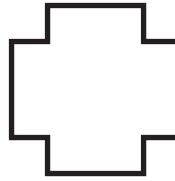
- A 45° ($\frac{1}{8}$ turn)
 B 90° ($\frac{1}{4}$ turn)
 C 180° ($\frac{1}{2}$ turn)
D 360° (full turn)

3. Which is the median?

{18, 4, 24, 9, 12, 9, 15}

- A 19
 B 13
C 12
 D 9

4.



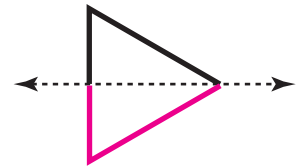
Does the figure pictured above have line symmetry? If so, how many lines of symmetry are there?

Yes. It has 4 lines of symmetry.

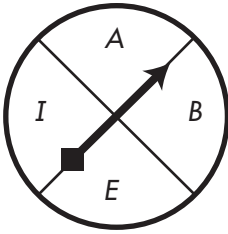
Does the figure have rotational symmetry? If so, what is the smallest turn that will rotate the figure back onto itself?

Yes; $\frac{1}{4}$ turn, or 90° .

5. Complete the two figures so that the dashed line is a line of symmetry for each one.

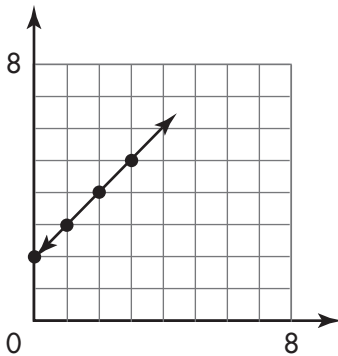


1. The drawing shows a spinner with 4 equal sections.



What are the chances that the spinner will land on a vowel?

- A 1 out of 3
 - B 1 out of 4
 - C 3 out of 3
 - D 3 out of 4**
2. Which ordered pair could be part of this line graph?



- A (2, 2)
- B (5, 7)**
- C (7, 5)
- D (5, 5)

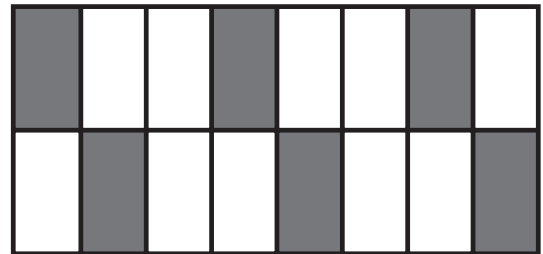
3. Suppose each square in a pentomino is a table that seats one person on a side. Draw the pentomino that seats the fewest people.



4. The normal daily high temperature in August in El Paso, Texas, is 96.1°F , or 35.611°C . Write these temperatures as mixed numbers.

$$\underline{96\frac{1}{10}^{\circ}\text{F}, 35\frac{611}{1000}^{\circ}\text{C}}$$

5. Write two fractions that name the shaded part of the rectangle.



$$\underline{\frac{6}{16}, \frac{3}{8}}$$

1. At a sports fair, Malina chooses to play 2 of these sports: basketball, baseball, flag football, soccer, and volleyball. How many different outcomes are there for Malina choosing any 2 sports?

- A 20
- B 10**
- C 4
- D 2

2. A sign shows the movies playing at a theater and the length of each movie.

Now Playing

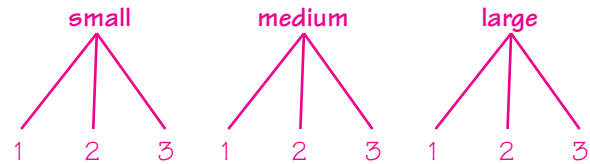
<i>The Day Before</i>	93 minutes
<i>All or Nothing</i>	108 minutes
<i>Little Scooters</i>	94 minutes
<i>Extra! Extra!</i>	94 minutes
<i>The Elephant</i>	126 minutes

What is the mean length of the movies?

- A 37 minutes
 - B 94 minutes
 - C 103 minutes**
 - D 126 minutes
3. The highest point in New Hampshire is 6,288 feet above sea level at Mt. Washington. Which is the best estimate of the height of Mt. Washington in yards?
- A 6,000 yards
 - B 3,000 yards
 - C 2,000 yards**
 - D 1,000 yards

4. At Paula’s Pizza Place, you can order a small, medium, or large pizza. Each pizza has 1, 2, or 3 toppings.

- a. Draw a tree diagram to show all the outcomes for ordering 1 pizza.



- b. How many different pizzas could you order?

9 pizzas

5. The table shows the number of cups of flour needed to make loaves of bread.

Loaves of Bread	1	2	3	4
Cups of Flour	4	8	12	16

Write an expression that shows the number of cups of flour needed to make n loaves of bread.

$4n$

6. During the soccer season, Nina’s team practices 23 times. Each practice lasts 75 minutes. What is the total number of minutes Nina’s team practices?

1,725 minutes

1. Consuela gets home from school at 4:25 P.M. She does homework and rides her bike until dinner at 6:10 P.M. How long does Consuela do homework and ride her bike?

A 1 hour 15 minutes
B 1 hour 45 minutes
 C 2 hours 15 minutes
 D 2 hours 35 minutes

2. Gina plays a game with letter tiles. There are 12 tiles with vowels and 24 tiles with consonants. Gina chooses a tile without looking. What is the probability that she chooses a vowel?

A $\frac{1}{3}$
 B $\frac{1}{2}$
 C $\frac{2}{3}$
 D $\frac{3}{4}$

3. Tamara gives her dog 2 treats at supper each night except Friday. On Friday, she gives her dog 3 treats at supper. Which shows the number of treats for a week?

A 5×6
 B 7×5
 C $2 \times 7 + 3$
D $6 \times 2 + 3$

4. Michael tells Jacob, "I'm thinking of a number between 1 and 20. Guess my number."

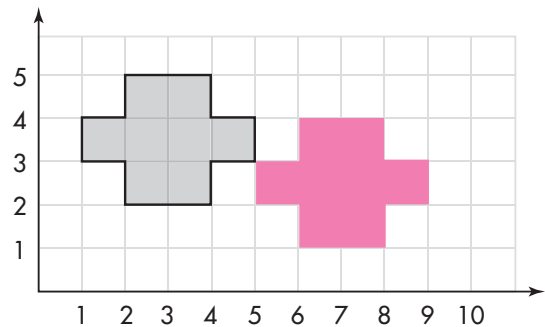
a. What is the probability that Michael's number is less than or equal to 15?

$\frac{3}{4}$

b. What is the probability that Jacob guesses Michael's number?

$\frac{1}{20}$

5. Translate the shape 4 units to the right and 1 unit down. Draw the result on the grid.



6. Vera builds tables. Each table takes 47 nails. If she has 752 nails, how many tables can Vera build?

16 tables

1. Erin asks 100 people to name their favorite sport.





Survey Results

Sport	People
Baseball	10
Basketball	30
Football	35
Soccer	15
Other	10

If Erin asks 120 people, which is the best prediction of the number who would choose soccer?

- A 18
- B 20
- C 35
- D 38

2. Tessa builds a table. The top is a polygon. Which could be the top of Tessa's table?

- A 
- B 
- C 
- D 

3. When Connor was born, his mass was 2,352 grams. What is this mass in milligrams?
- A 200,352 mg
 - B 2,000,352 mg
 - C 2,352,000 mg
 - D 23,520,000 mg

4. A theater shows 3 movies at the same time. Forty-two people are waiting in line. The table shows which movie the first 12 people in line buy tickets for.

Movie	<i>In the Middle</i>	<i>Above the Line</i>	<i>Was It You?</i>
Tickets	4	6	2

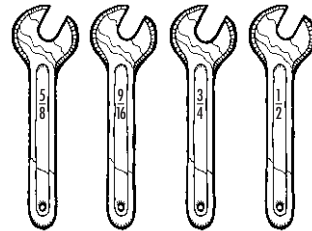
Predict how many of the 42 people will buy a ticket for each movie.

In the Middle—14

Above the Line—21

Was It You?—7

5. A hardware store sells a set of four wrenches.



List the wrenches in order from smallest to largest.

$\frac{1}{2}$ inch, $\frac{9}{16}$ inch,
 $\frac{5}{8}$ inch, $\frac{3}{4}$ inch

6. A student club raises \$145.75 for an animal shelter and \$238.87 for a daycare center. How much money did the club raise in all?

$\$384.62$