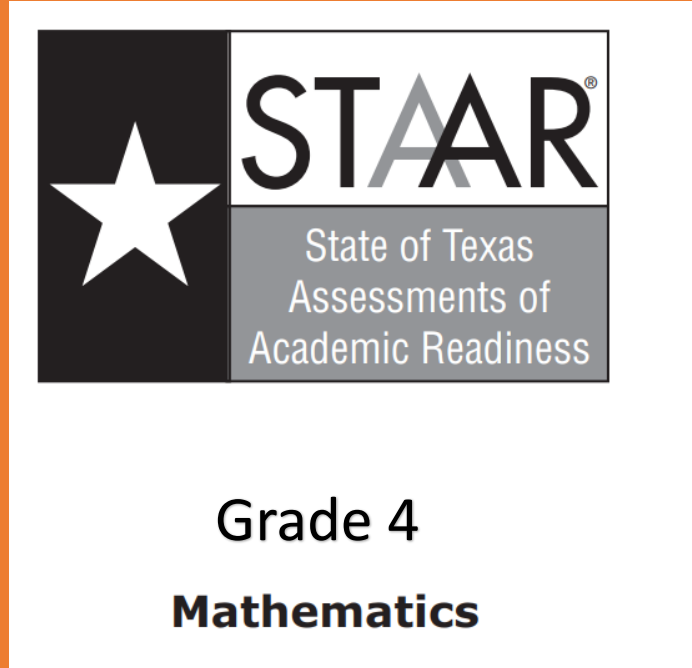


STAAR Items in A Box

Readiness Standards



Key Code:

A → F → W

B → G → X

C → H → Y

D → J → Z

Which statement about the number 726,483.19 is true?

- F** The digit 9 has a value of (9×100) .
- G** The digit 4 has a value of (4×100) .
- H** The digit 8 has a value of (8×0.1) .
- J** The digit 2 has a value of (2×10) .

4th Grade Math
Readiness Standard
Category 1

In 2008 the total number of cell phone users in Indonesia was about 140,578,000. Which expression has the same value as 140,578,000?

F $100,000,000 + 40,000,000 + 5,000,000 + 700,000 + 80,000$

G $100,000,000 + 40,000,000 + 500,000 + 70,000 + 8,000$

H $10,000,000 + 4,000,000 + 500,000 + 70,000 + 8,000$

J $100,000,000 + 40,000,000 + 500 + 70 + 8$

The number 47.06 can be expressed as —

- A** $(4 \times 10) + (7 \times 1) + (6 \times 0.01)$
- B** $(4 \times 10) + (7 \times 1) + (6 \times 0.1)$
- C** $(4 \times 1) + (7 \times 1) + (0 \times 1) + (6 \times 1)$
- D** $(4 \times 10) + (7 \times 1) + (0 \times 10) + (6 \times 100)$

People in the United States drink about 129,600,000 bottles of water each day.
What is the value of the digit 1 in this number?

- A 100,000,000
- B 100
- C 1,000
- D 100,000

Workers at a company fixed 37,015.08 meters of pipe. How is this number written in expanded notation?

A $(3 \times 10,000) + (7 \times 1,000) + (1 \times 100) + (5 \times 10) + (8 \times 0.1)$

B $(3 \times 10,000) + (7 \times 1,000) + (1 \times 10) + (5 \times 1) + (8 \times 0.1)$

C $(3 \times 1,000) + (7 \times 100) + (1 \times 10) + (5 \times 1) + (8 \times 0.01)$

D $(3 \times 10,000) + (7 \times 1,000) + (1 \times 10) + (5 \times 1) + (8 \times 0.01)$

The number of movie tickets sold at a theater last year can be written in expanded notation, as shown.

$$(8 \times 100,000) + (6 \times 1,000)$$

What is this number written in standard form?

- A** 860,000
- B** 86,000
- C** 806,000
- D** 8,006,000

Della wrote a number:

- The digit in the hundredths place is a 4.
- The digit in the thousands place is a 7.
- The digit in the tenths place is a 2.

Which number could be the number Della wrote?

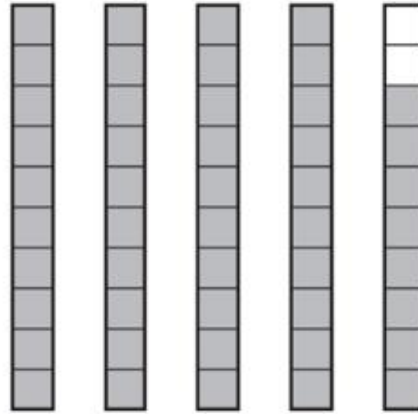
F 537,106.24

G 17,420

H 27,389.04

J 70.24

Estelle shaded the model below to represent the height of a building that is 4.8 meters tall.



Which fraction represents the height of this building in meters?

A $4\frac{8}{10}$

B $\frac{48}{50}$

C $4\frac{8}{100}$

D $\frac{48}{100}$

Which equation shows an equivalent decimal and fraction?

F $12.09 = 12\frac{9}{10}$

G $12.09 = 12\frac{9}{100}$

H $12.90 = 12\frac{1}{90}$

J $12.90 = 12\frac{90}{10}$

Mrs. Briones has a pitcher that contains $3\frac{75}{100}$ quarts of lemonade. Which decimal is equivalent to this number?

F 3.075

G 3.75

H 0.375

J 300.75

In science class Douglas measured the mass of a rock in kilograms. The mass of the rock was 0.26 kg. Which fraction is equivalent to this number?

F $\frac{26}{100}$

G $\frac{26}{10}$

H $2\frac{6}{100}$

J $2\frac{1}{6}$

Which fraction is equivalent to 1.5?

F $\frac{15}{10}$

G $\frac{15}{100}$

H $\frac{100}{15}$

J $\frac{10}{15}$

Which decimal is equivalent to $\frac{79}{100}$?

- A** 0.079
- B** 0.79
- C** 7.9
- D** 79.100

Which equation shows a decimal and a fraction that are equivalent?

F $23.5 = 23\frac{5}{100}$

G $23.55 = 23\frac{55}{10}$

H $23.05 = 23\frac{5}{10}$

J $23.5 = 23\frac{50}{100}$

Paul threw a baseball 18.7 meters. Which fraction is equivalent to 18.7?

F $18\frac{7}{100}$

G $\frac{18}{70}$

H $18\frac{7}{10}$

J $\frac{187}{100}$

Which comparison is true?

F $\frac{1}{5} < \frac{2}{4}$

G $\frac{2}{3} < \frac{1}{2}$

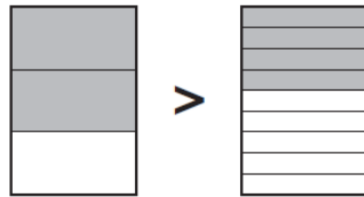
H $\frac{1}{4} < \frac{2}{10}$

J $\frac{1}{3} < \frac{2}{7}$

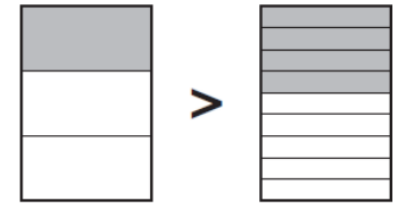
Sergio completed $\frac{2}{3}$ of a project. Julius completed $\frac{4}{9}$ of an identical project. Each student shaded a model to represent the fraction of the project he completed.

Which student completed more of his project?

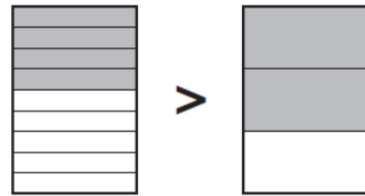
F Sergio completed more, because



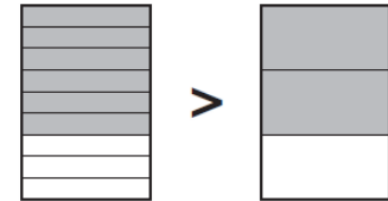
H Sergio completed more, because



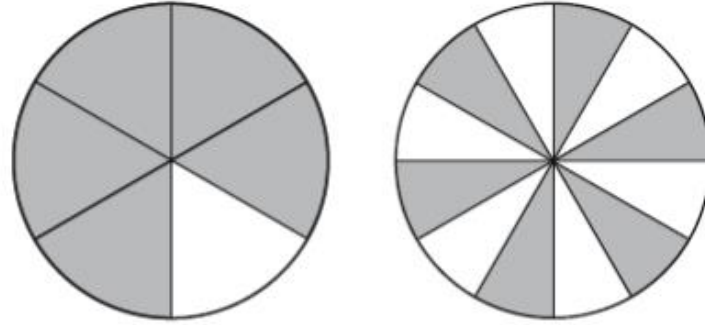
G Julius completed more, because



J Julius completed more, because



The models are shaded to represent two fractions.



Which statement correctly compares these two fractions?

A $\frac{5}{6} > \frac{6}{12}$

B $\frac{5}{6} = \frac{6}{12}$

C $\frac{5}{6} < \frac{6}{12}$

D None of these

Ms. Thompson needs $\frac{15}{2}$ yards of red fabric and $7\frac{1}{2}$ yards of silver fabric. Which comparison is true?

A $\frac{15}{2} > 7\frac{1}{2}$

B $\frac{15}{2} = 7\frac{1}{2}$

C $\frac{15}{2} < 7\frac{1}{2}$

D None of these

The table shows the fractions of the bulletin boards in four classrooms that will be used to display artwork.

Artwork on Bulletin Boards

Teacher	Fraction for Artwork
Ms. Brady	$\frac{5}{10}$
Mr. Chang	$\frac{2}{4}$
Ms. Gupta	$\frac{5}{6}$
Mr. Taylor	$\frac{4}{8}$

Which comparison is true?

F $\frac{2}{4} > \frac{4}{8}$

G $\frac{4}{8} < \frac{5}{10}$

H $\frac{5}{6} > \frac{4}{8}$

J $\frac{5}{6} < \frac{5}{10}$

Which fraction belongs in the to make this comparison true?

$$\frac{3}{7} > \square$$

A $\frac{1}{4}$

B $\frac{2}{3}$

C $\frac{1}{2}$

D $\frac{3}{5}$

This chart shows four comparisons.

W	$\frac{8}{12} < \frac{8}{10}$
X	$\frac{8}{12} < \frac{4}{6}$
Y	$\frac{8}{12} < \frac{9}{12}$
Z	$\frac{8}{12} < \frac{6}{8}$

Which of these comparisons are true?

- F Only W
- G Only X and Z
- H Only W, Y, and Z
- J None of these

Yasmine made waffles for her family.

- $\frac{4}{7}$ of the waffles were blueberry.
- $\frac{1}{7}$ of the waffles were chocolate chip.
- The rest of the waffles did not have blueberries or chocolate chips.

What fraction of the waffles did not have blueberries or chocolate chips?

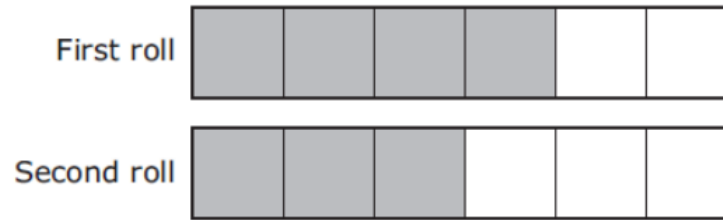
F $\frac{5}{7}$, because $\frac{4}{7} + \frac{1}{7} = \frac{5}{7}$

G $\frac{12}{7}$, because $\frac{4}{7} + \frac{1}{7} = \frac{5}{7}$ and $\frac{7}{7} + \frac{5}{7} = \frac{12}{7}$

H $\frac{3}{7}$, because $\frac{4}{7} - \frac{1}{7} = \frac{3}{7}$

J $\frac{2}{7}$, because $\frac{4}{7} + \frac{1}{7} = \frac{5}{7}$ and $\frac{7}{7} - \frac{5}{7} = \frac{2}{7}$

Mrs. Bernstein used parts of two identical rolls of paper to wrap packages. The models are shaded to represent the part of each roll of paper she used.



What fraction of the rolls of paper did Mrs. Bernstein use to wrap the packages?

- A** $\frac{1}{6}$
- B** $1\frac{3}{6}$
- C** $\frac{3}{6}$
- D** $1\frac{1}{6}$

Mrs. Owen ordered two foot-long sandwiches for her three children to share. The picture shows the two sandwiches cut in half. Each child ate half a sandwich.



Which fraction represents the number of sandwiches the children ate?

F $\frac{3}{2}$

G $\frac{2}{3}$

H $\frac{4}{2}$

J $\frac{3}{6}$

Ignacio and Elaine read the same book. The shaded part of each model represents the fraction of the book that each student read.



Which expression can be used to find the difference between the fraction of the book Elaine read and the fraction of the book Ignacio read?

F $\frac{16}{4} - \frac{13}{7}$

G $\frac{7}{13} - \frac{4}{16}$

H $\frac{16}{20} - \frac{13}{20}$

J $\frac{20}{16} - \frac{20}{13}$

Zeke used $\frac{3}{4}$ cup white sugar, $\frac{3}{4}$ cup brown sugar, and $2\frac{1}{4}$ cups of flour to bake some cookies.

What was the difference between the amount of flour and the combined amount of sugar Zeke used?

F $3\frac{3}{4}$ cups

G $1\frac{2}{4}$ cups

H $\frac{2}{4}$ cup

J $\frac{3}{4}$ cup

Kendrick used $4\frac{5}{8}$ bags of dirt in a garden of roses and $9\frac{1}{8}$ bags of dirt in a garden of wildflowers. Which equation can be used to find the number of bags of dirt Kendrick used?

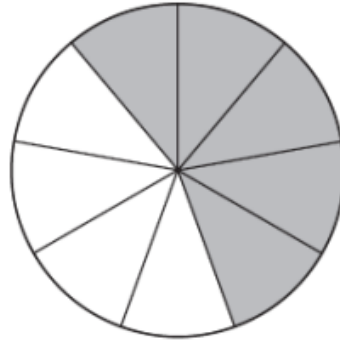
F $\frac{4}{8} + \frac{5}{8} + \frac{9}{8} + \frac{1}{8} = \frac{19}{8}$

G $\frac{9}{8} + \frac{10}{8} = \frac{19}{16}$

H $\frac{20}{8} + \frac{9}{8} = 3\frac{5}{8}$

J $4 + 9 + \frac{5}{8} + \frac{1}{8} = 13\frac{6}{8}$

The shaded parts of the model represent the combined fraction of a small pie that Darrell and Nani ate. Darrell ate $\frac{2}{9}$ of the pie.



What fraction of the pie did Nani eat?

- A $\frac{5}{9}$
- B $\frac{3}{9}$
- C $\frac{2}{9}$
- D $\frac{4}{9}$

The list shows the number of trees Isaiah planted in three years.

- He planted 521 trees in the first year.
- He planted 387 trees in the second year.
- He planted 438 trees in the third year.

Isaiah wants to plant a total of 2,000 trees. How many more trees does Isaiah need to plant?

- A** 654
- B** 1,346
- C** 874
- D** 764

Jana bought 1 hat and 2 skirts. The hat cost \$28.53, and the skirts cost \$15.88 each. What was the total cost in dollars and cents of the items Jana bought?

Mr. Conrad makes chess pieces. A chess club ordered a set of chess pieces for each of its members.

- Each set has 32 chess pieces.
- There are 27 members of the chess club.
- Mr. Conrad put these chess pieces in 6 boxes with the same number of pieces in each box.

How many chess pieces did Mr. Conrad put in each box?

- A** 864
- B** 192
- C** 354
- D** 144

Hannah drew straight lines on her driveway with chalk. The table shows the lengths of the lines.

Hannah's Chalk Lines

Line	Length (meters)
P	1.8
Q	4.05
R	7
S	7.75

What is the difference in meters between the length of Line S and the length of Line P?

- A 7.57 m
- B 5.95 m
- C 3.70 m
- D 6.15 m

The owners of a business rented 4,506.23 square feet of space in an office building. They plan to use 281.6 square feet of the space for the kitchen.

How many square feet of space are left?

- F** 4,224.63 square feet
- G** 4,385.43 square feet
- H** 4,478.07 square feet
- J** 4,225.17 square feet

The list shows the numbers of visitors who arrived and the numbers of visitors who left a science museum for the first three hours after it opened one day.

- In the first hour, 294 visitors arrived.
- In the second hour, 408 visitors arrived and 89 visitors left.
- In the third hour, 313 visitors arrived and 175 visitors left.

How many visitors were in the science museum after the third hour?

F 457

G 751

H 1,015

J 901

Lindsey purchased one pet carrier that cost \$21.89 and 2 bags of cat food that cost \$16.49 each. What was the total cost of these items?

- A \$54.87
- B \$38.38
- C \$43.67
- D \$32.98

Diane worked 18 hours each week during the summer. She worked a total of 8 weeks and earned \$9 an hour. How much money did Diane earn during the summer?

F \$306

G \$1,296

H \$156

J \$1,386

Mr. Conrad makes chess pieces. A chess club ordered a set of chess pieces for each of its members.

- Each set has 32 chess pieces.
- There are 27 members of the chess club.
- Mr. Conrad put these chess pieces in 6 boxes with the same number of pieces in each box.

How many chess pieces did Mr. Conrad put in each box?

- A** 864
- B** 192
- C** 354
- D** 144

Eric has 158 action figures to put in display cases. Each display case can hold 8 action figures. How many cases does Eric need to hold all his action figures?

F 18

G 20

H 19

J 21

Valerie had a jug that contained 128 fl oz of salsa to put into bowls at a restaurant. She filled each bowl with 6 fl oz of salsa until there was not enough salsa left in the jug to completely fill another bowl.

How many fluid ounces of salsa were left in the jug?

- F** 22 fl oz
- G** 21 fl oz
- H** 122 fl oz
- J** 2 fl oz

Fran bought 4 shirts that were \$13 each. She also bought a pair of socks for \$4.29.

What was the total amount Fran paid for the shirts and socks?

- F \$21.29
- G \$56.29
- H \$69.16
- J Not here

4th Grade Math
Readiness Standard
Category 2

A baker made 24 cakes each day for 2 days. He used 4 cups of flour for each cake he made.

What was the total number of cups of flour the baker used on these 2 days?

Record your answer and fill in the bubbles on your answer document. Be sure to use the correct place value.

Ms. Wilmeth bought 4 bags of candies. Each bag contained 8 candies. She put an equal number of these candies into each of 9 gift boxes.

How many candies were left over?

F 3

G 4

H 0

J 5

There are 20 rows of pumpkins on a farm. There are 6 pumpkins in each row. A farmer will use 3 trucks to take all of the pumpkins to a market. The farmer will put the same number of pumpkins in each truck.

How many pumpkins will be in each truck?

- A 120
- B 40
- C 360
- D 26

Meredith had 12 packages of erasers to put into bags.

- Each package had 43 erasers.
- She put 6 erasers into each bag.

What is the greatest number of bags Meredith could have put erasers into?

A factory makes 400 refrigerators every day. The factory makes 125 more stoves per day than refrigerators. Which equation can be used to find x , the total number of refrigerators and stoves the factory makes in one day?

F $x = 400 + 400 + 125$

G $x = 400 + 125$

H $x = 400 + 400 - 125$

J $x = 400 - 125$

Mark had 45 football cards. Josh had twice as many football cards as Mark. Josh then bought 5 more football cards. Which equation can be used to find f , the number of football cards Josh has now?

A $2 \times 45 + 5 = f$

B $2 \times 45 - 5 = f$

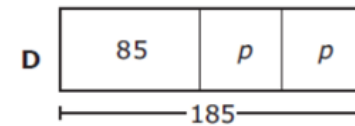
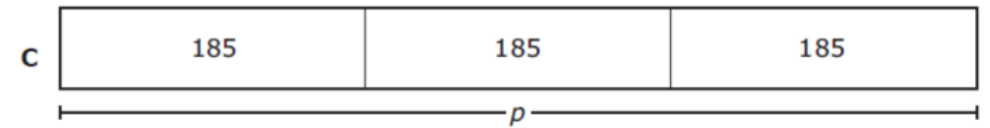
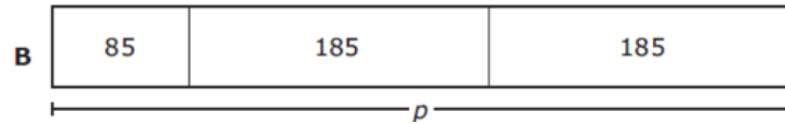
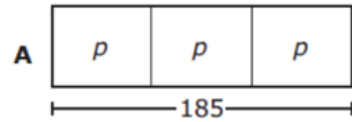
C $2 + 45 \times 5 = f$

D $2 + 45 + 5 = f$

Sabra read a total of 185 pages in three days.

- On the first day, she read 85 pages.
- On the second and third days, she read the same number of pages.

Which diagram shows a way to find p , the number of pages Sabra read on the third day?



It took Ian three years to collect 25,413 aluminum cans to recycle. In the first year he collected 8,917 cans, and in the second year he collected 7,639 cans.

Which equation can be used to find x , the number of cans Ian collected in the third year?

A $x = 25,413 - 8,917 - 7,639$

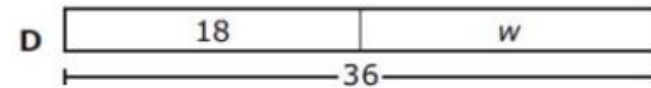
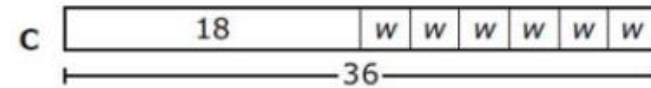
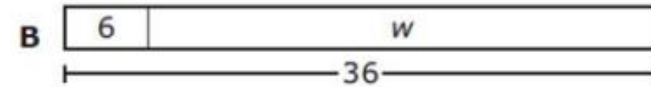
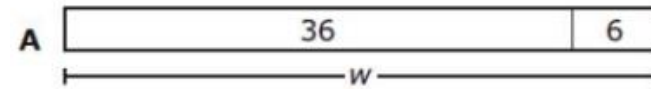
B $x = 25,413 + 8,917 + 7,639$

C $x = 8,917 + 7,639$

D $x = 8,917 - 7,639$

Alexa had a total of 36 bottles of water. She drank half of the bottles of water last week. Alexa will drink the remaining water bottles during the next 6 days. She will drink the same number of bottles each day.

Which strip diagram shows a way to find w , the number of water bottles Alexa will drink during each of the next 6 days?



Each Saturday Mr. Franklin teaches 3 piano lessons at his music school and 4 piano lessons in students' homes.

- For each lesson at his music school, he charges \$15.
- For each lesson in a student's home, he charges \$20.

Which set of equations can be used to find m , the amount of money in dollars Mr. Franklin earns from piano lessons each Saturday?

F $15 \times 4 = 60$
 $20 \times 3 = 60$
 $60 + 60 = m$

G $15 \div 3 = 5$
 $20 \div 4 = 5$
 $5 + 5 = m$

H $15 \times 3 = 45$
 $20 \times 4 = 80$
 $80 - 45 = m$

J $15 \times 3 = 45$
 $20 \times 4 = 80$
 $45 + 80 = m$

At a school store, folders cost 27 cents each and water bottles cost 93 cents each. Berta has 80 cents.

Which set of equations can be used to find c , the number of cents Berta still needs in order to buy 2 folders and 1 water bottle?

A $27 + 93 = 120$
 $120 - 80 = c$

C $27 + 93 = 120$
 $120 + 80 = c$

B $27 \times 2 = 54$
 $54 + 93 = 147$
 $147 - 80 = c$

D $27 \times 2 = 54$
 $54 + 93 = 147$
 $147 + 80 = c$

A number pattern begins with the values shown.

8, 16, 24, 32, ...

Which table correctly represents the relationship between the position of a number in the pattern and the value of that number?

F

Position	Numerical Expression	Value
1	$1 + 8$	9
2	$2 + 8$	10
3	$3 + 8$	11
4	$4 + 8$	12

H

Position	Numerical Expression	Value
1	1×8	8
2	2×8	16
3	3×8	24
4	4×8	32

G

Position	Numerical Expression	Value
8	$8 + 0$	8
16	$16 + 0$	16
24	$24 + 0$	24
32	$32 + 0$	32

J

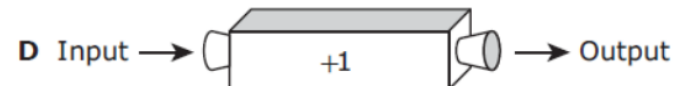
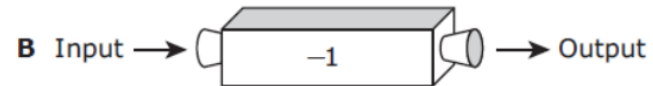
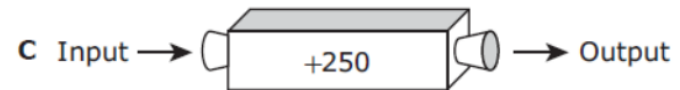
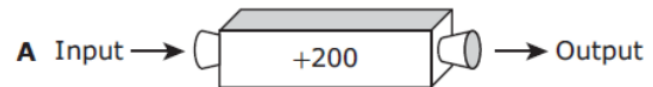
Position	Numerical Expression	Value
8	8×1	8
16	16×1	16
24	24×1	24
32	32×1	32

The table shows a relationship between the input numbers and the output numbers generated by a number machine.

Number Machine

Input	Output
1	251
2	252
3	253
4	254

Which number machine shows the same relationship as the one shown in the table?



The rule $+38$ is used to show the relationship between the position of a number in a pattern and the value of that number. Which table shows this relationship?

A

Position	Expression	Value
38	$38 + 1$	39
38	$38 + 2$	40
38	$38 + 3$	41
38	$38 + 4$	42

C

Position	Expression	Value
1	$1 + 37$	38
2	$2 + 36$	38
3	$3 + 35$	38
4	$4 + 34$	38

B

Position	Expression	Value
38	38×1	38
38	$38 + 0$	38
38	$38 \div 1$	38
38	$38 - 0$	38

D

Position	Expression	Value
1	$1 + 38$	39
2	$2 + 38$	40
3	$3 + 38$	41
4	$4 + 38$	42

A number pattern begins with these values.

6, 12, 18, 24, . . .

Which table correctly represents the relationship between the position of a number in the pattern and the value of that number?

F

Position	Numerical Expression	Value
6	6×1	6
12	12×1	12
18	18×1	18
24	24×1	24

H

Position	Numerical Expression	Value
6	$6 \div 6$	1
12	$12 \div 6$	2
18	$18 \div 6$	3
24	$24 \div 6$	4

G

Position	Numerical Expression	Value
1	$1 + 6$	7
2	$2 + 6$	8
3	$3 + 6$	9
4	$4 + 6$	10

J

Position	Numerical Expression	Value
1	1×6	6
2	2×6	12
3	3×6	18
4	4×6	24

The table shows the relationship between the position of a number in a pattern and its value.

Position	Value
1	33
2	34
3	35
4	36

Which rule shows how to find the value when given the position?

A $\times 33$

B $- 32$

C $\div 33$

D $+ 32$

The table shows a relationship between input numbers and output numbers.

Number Machine

Input	Output
1	10
2	11
3	12
4	13

Which rule can be used to find the output number when the input number is given?

F $- 9$

G $\times 10$

H $\times 4$

J $+ 9$

Use the ruler provided to measure the length and width of each rectangle to the nearest centimeter.



What is the difference between the perimeters of these rectangles in centimeters?

- F** 3 cm, because $6 - 3 = 3$
- G** 2 cm, because $8 - 6 = 2$
- H** 4 cm, because $16 - 12 = 4$
- J** 1 cm, because $9 - 8 = 1$

Sebastian had a rectangular piece of paper that was 90 mm long and 50 mm wide. He cut the paper in half. What is the area of each half of the paper in square millimeters?

- A 4,500 square millimeters
- B 9,000 square millimeters
- C 2,250 square millimeters
- D 1,125 square millimeters

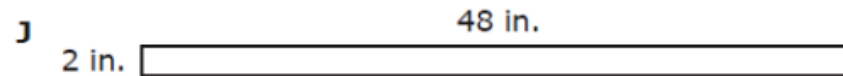
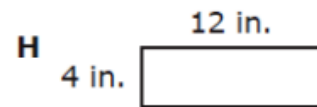
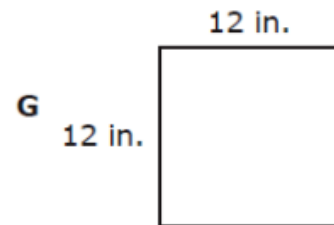
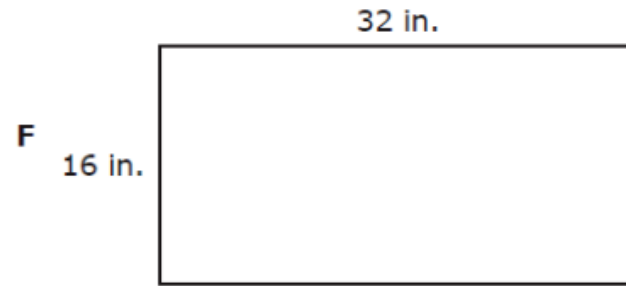
A rug shaped like a rectangle has a width of 3 m. The length of the rug is 2 m greater than its width. What is the perimeter of the rug in meters?

- A 10 m
- B 16 m
- C 8 m
- D 15 m

Mr. Yates walks around the perimeter of a square playground every day for exercise. Each side of the playground is 29 yards long.

What is the perimeter of the playground in yards?

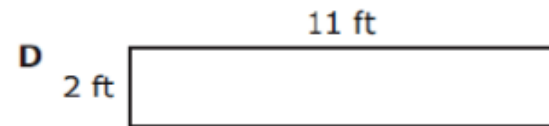
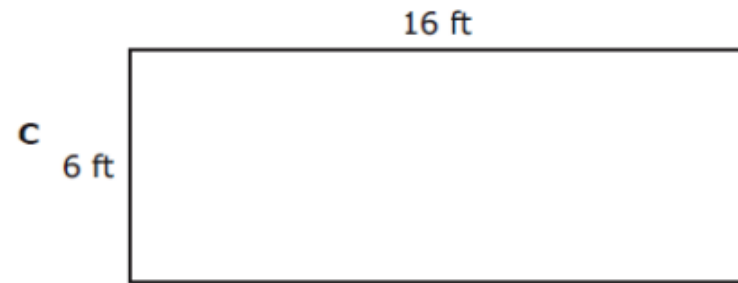
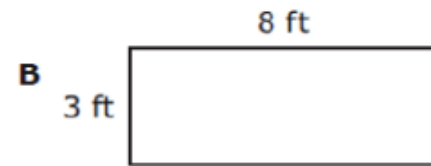
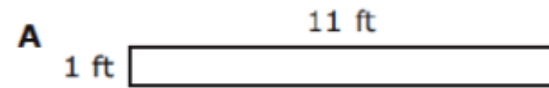
Keith made a rectangular sign that had a perimeter of 48 inches. Which model could represent the sign Keith made?



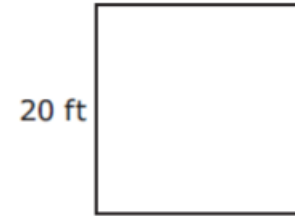
The rectangular top of Kathleen's desk has a length of 24 inches and a width of 17 inches. What is the area of the top of Kathleen's desk in square inches?

- A** 192 square inches
- B** 82 square inches
- C** 408 square inches
- D** 41 square inches

The perimeter of a rectangular bulletin board is 22 feet. Which model could show the dimensions of this bulletin board in feet?



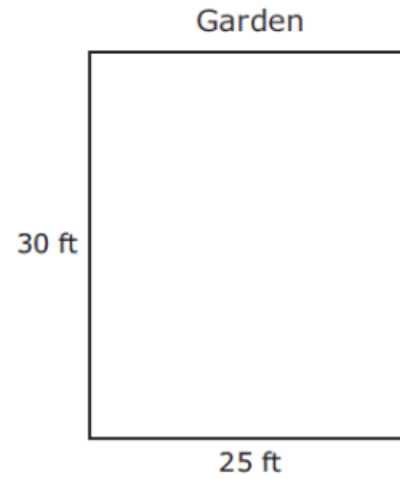
The width of a square playground is shown in feet.



What is the area of the playground in square feet?

- F** 40 square feet
- G** 80 square feet
- H** 400 square feet
- J** 220 square feet

Harrison has a rectangular garden in his backyard. The dimensions are shown in feet.



What is the perimeter of the garden in feet?

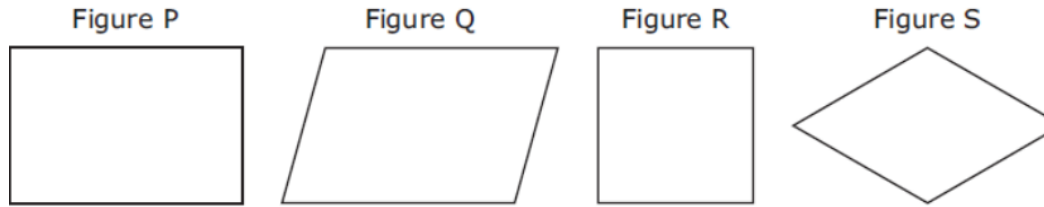
Which figure **cannot** have parallel line segments?

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

Liza drew a figure on the front of her notebook that has two obtuse angles. Which figure could be the one Liza drew?

- F Rectangle
- G Obtuse triangle
- H Parallelogram
- J Right triangle

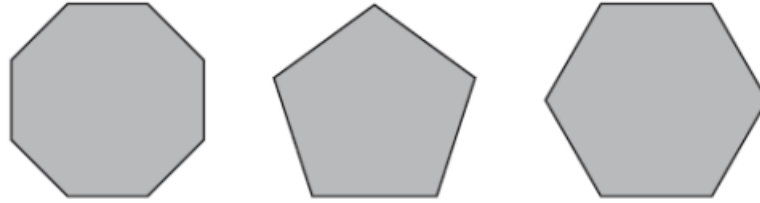
Four figures are shown.



Which figures appear to be rectangles?

- A Figures Q and S
- B Figures R and S
- C Figures P and R
- D Figures P and Q

Ruth sorted polygons into groups. The polygons shown belong in the same group.



Which description best represents this group?

- A** Polygons with perpendicular and parallel lines
- B** Polygons with perpendicular lines only
- C** Polygons with acute and obtuse angles
- D** Polygons with obtuse angles only

Landry drew a flag with exactly one pair of perpendicular sides. Which of these could be the shape of the flag?

- F** Right triangle
- G** Acute triangle
- H** Rectangle
- J** Square

Hayden drew a polygon that has exactly two right angles. Which of these could be the polygon Hayden drew?

- A Right triangle
- B Right trapezoid
- C Rectangle
- D Rhombus

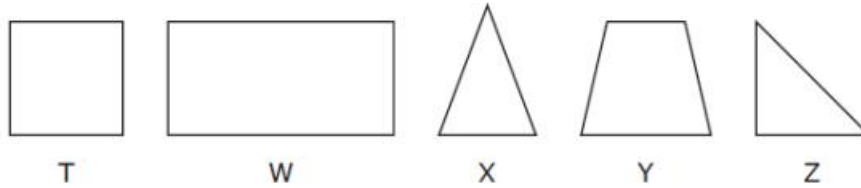
These polygons belong in the same group.



Which statement best describes the polygons in this group?

- F** Each polygon has at least one pair of parallel sides.
- G** Each polygon has at least one obtuse angle.
- H** Each polygon has at least one right angle.
- J** Each polygon has at least one acute angle.

A group of figures is shown.



Which list shows all the figures in the group that appear to have at least one right angle?

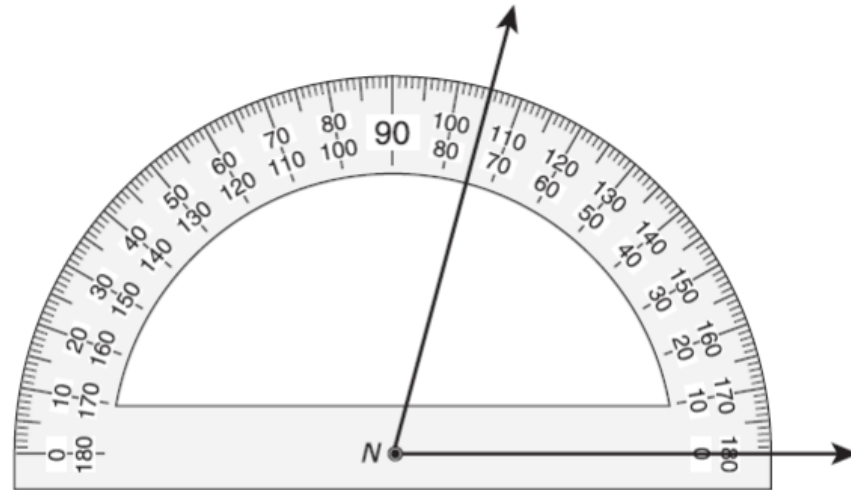
- A Figures T, W, and Y only
- B Figures T, W, and Z only
- C Figures T and Z only
- D Figures X and Z only

Maribel drew a shape. The shape has exactly one pair of opposite sides that are parallel. None of the sides are perpendicular to each other.

Which shape can be the one Maribel drew?

- F Trapezoid
- G Rhombus
- H Square
- J Rectangle

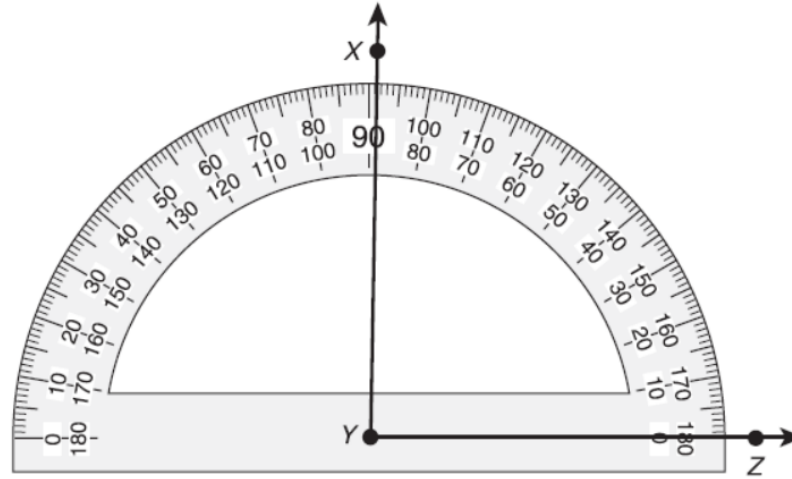
Angle N is shown on this protractor.



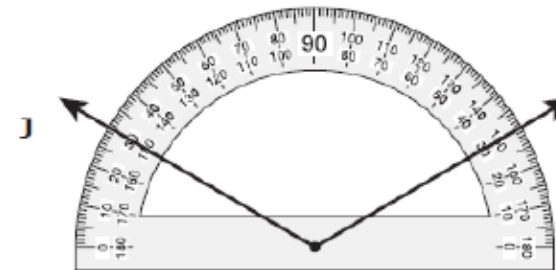
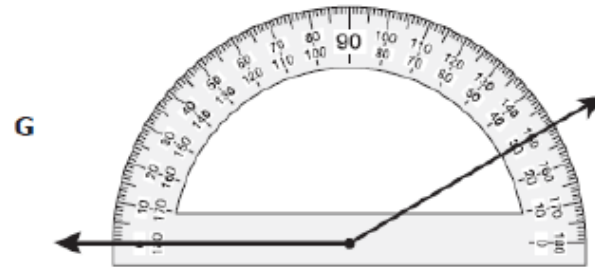
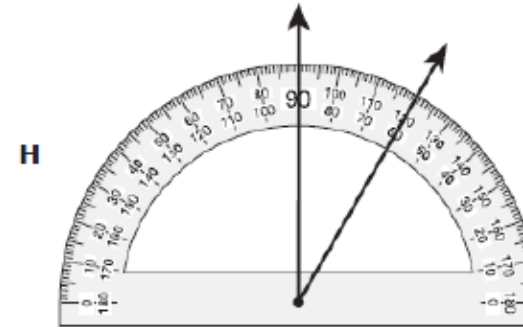
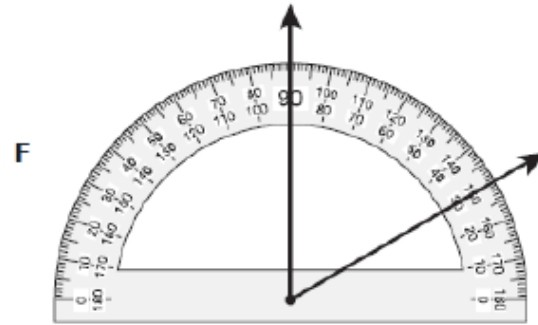
What is the measure of angle N to the nearest degree?

- A 75°
- B 105°
- C 80°
- D 180°

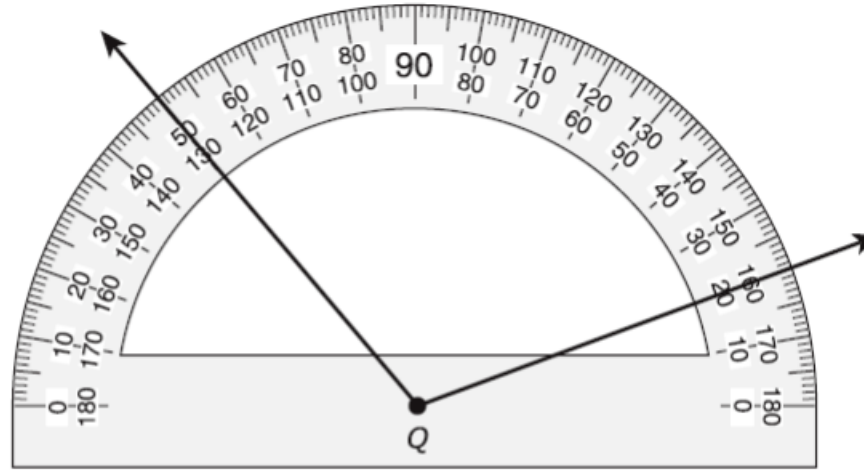
What is the measure of angle XYZ to the nearest degree?



- A 180°
- B 109°
- C 91°
- D 89°

Which angle has a measure closest to 30° ?

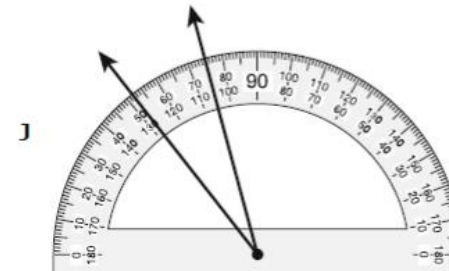
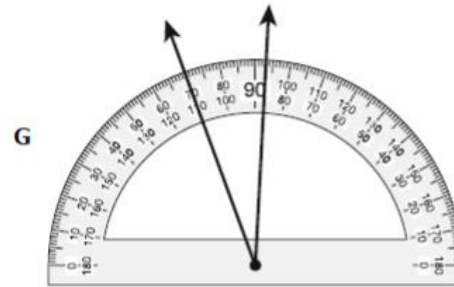
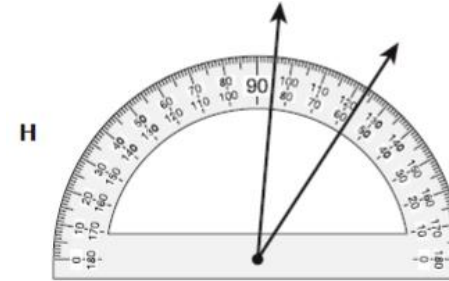
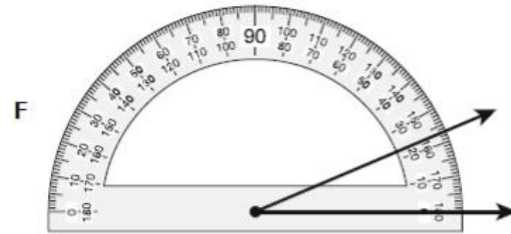
Angle Q is shown on this protractor.



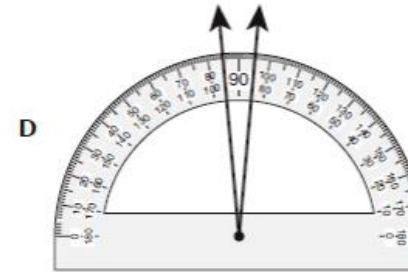
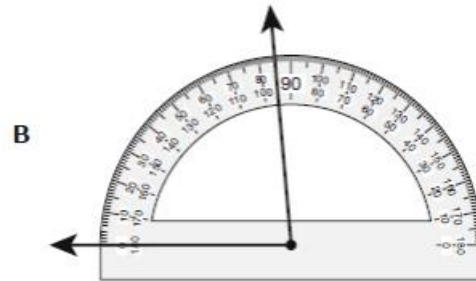
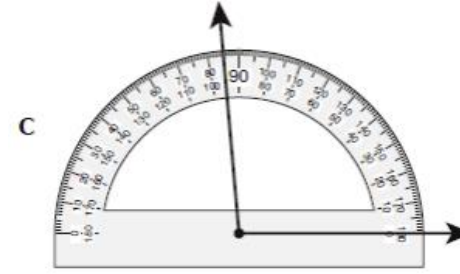
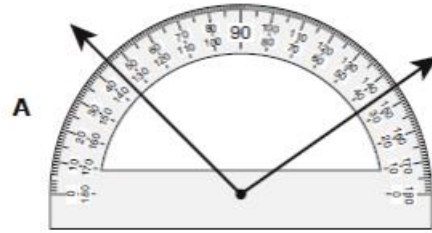
What is the measure of angle Q to the nearest degree?

- A** 70° , because 50° plus 20° equals 70°
- B** 150° , because 130° plus 20° equals 150°
- C** 30° , because 160° minus 130° equals 30°
- D** 110° , because 160° minus 50° equals 110°

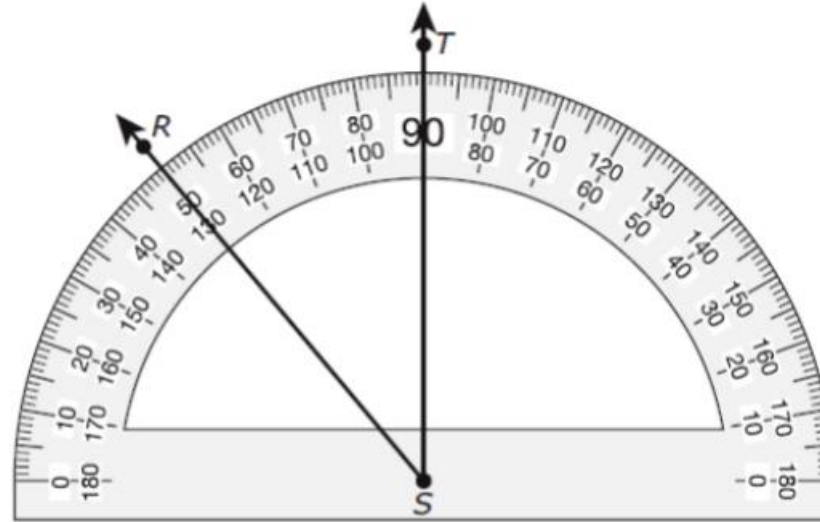
Which angle does NOT appear to have a measure of 23°?



Which angle has a measure closest to 95° ?

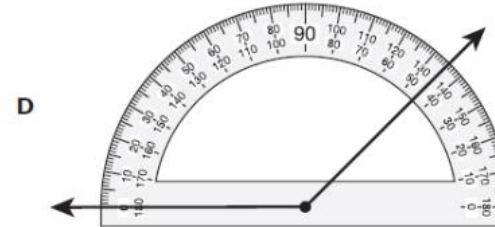
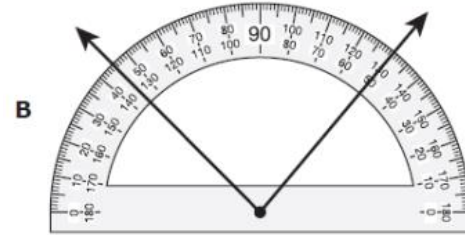
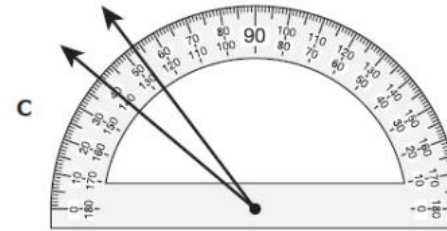
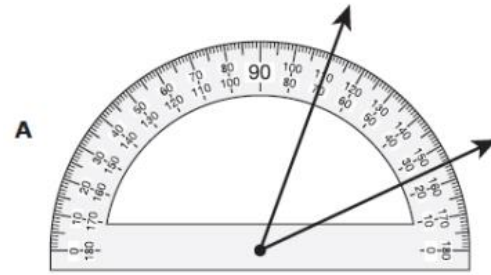


What is the measure of angle RST to the nearest degree?



- A 40°
- B 50°
- C 130°
- D 80°

Which angle has a measure closest to 45° ?



A geyser is an underground hot spring that shoots water and steam into the air. At Yellowstone National Park there is a geyser that erupts once every 44 to 125 minutes. If the geyser erupted one day at 1:04 P.M., at which time could the geyser erupt next?

- A** 1:44 P.M.
- B** 3:29 P.M.
- C** 3:05 P.M.
- D** 1:25 P.M.

Tyra opened a new bag of birdseed and filled 3 bird feeders. She put 2,500 grams of birdseed into each feeder. There were 1,500 grams of birdseed left in the bag. What was the mass of the bag of birdseed in kilograms before Tyra opened it?

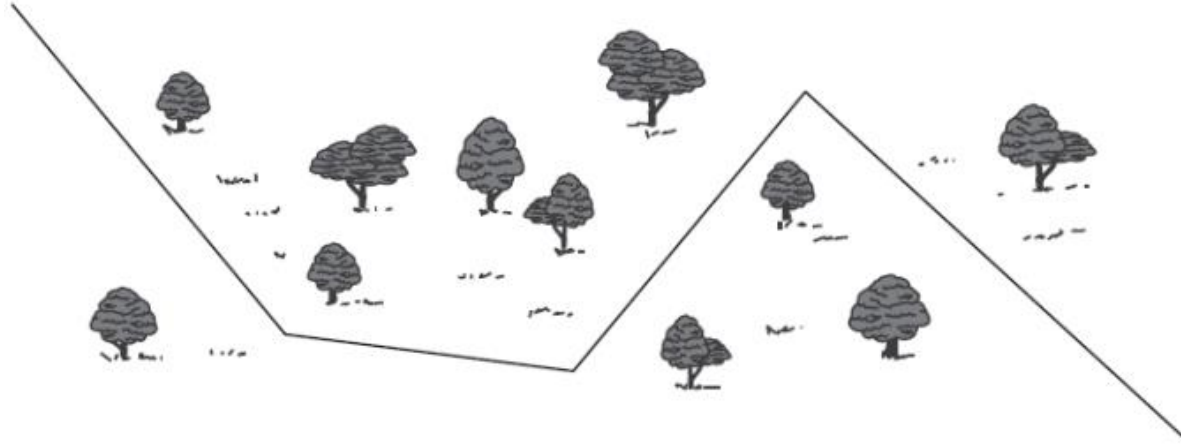
F 4 kg

G 4,000 kg

H 9 kg

J 9,000 kg

In the diagram below, the line segments represent four parts of a walking trail in a park. Use the ruler provided to measure the length of each line segment to the nearest centimeter.



Which measurement is closest to the total length in centimeters of the walking trail shown in the diagram?

- A 9 cm
- B 26 cm
- C 22 cm
- D 18 cm

The table shows the chores Randy did Saturday morning and the amount of time he spent on each chore.

Randy's Chores

Chore	Amount of Time (minutes)
Sweeping the garage	40
Raking the yard	55
Cleaning tools	35
Washing the car	45
Weeding the garden	30

How much time did Randy spend doing these chores?

- F 3 hours 25 minutes
- G 3 hours 30 minutes
- H 2 hours 5 minutes
- J 2 hours 45 minutes

Melanie had two \$10 bills, one \$5 bill, four dimes, and six pennies. Then she bought a fruit cup for \$2.19.

How much money did Melanie have after she bought the fruit cup?

F \$27.65

G \$25.46

H \$23.27

J \$23.07

Olivia has 2 gallons and 3 quarts of vanilla ice cream and 1 gallon and 2 quarts of chocolate ice cream left over from a party.

What is the total number of gallons and quarts of ice cream that Olivia has left over?

- A** 1 gal 1 qt
- B** 4 gal 1 qt
- C** 5 gal 3 qt
- D** 5 gal 1 qt

A customer bought almonds and walnuts at a grocery store.

- The customer bought 1 pound 15 ounces of almonds.
- The customer also bought 3 pounds 4 ounces of walnuts.

What is the total amount of almonds and walnuts in pounds and ounces that the customer bought?

A 4 lb 3 oz

B 5 lb 9 oz

C 4 lb 11 oz

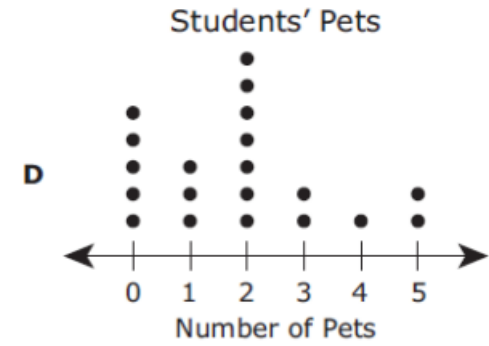
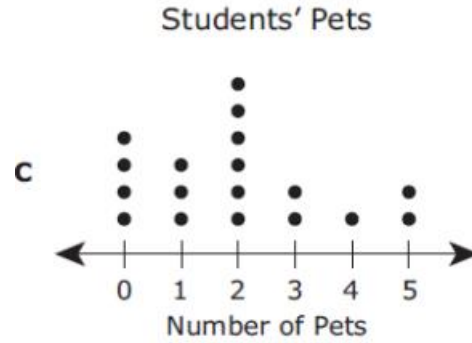
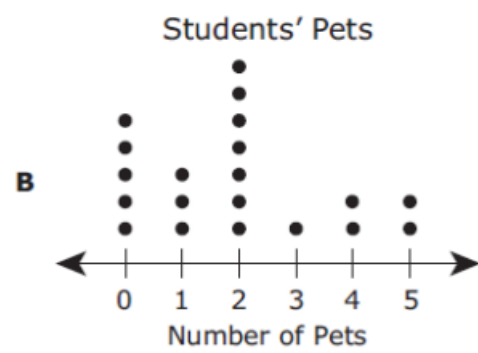
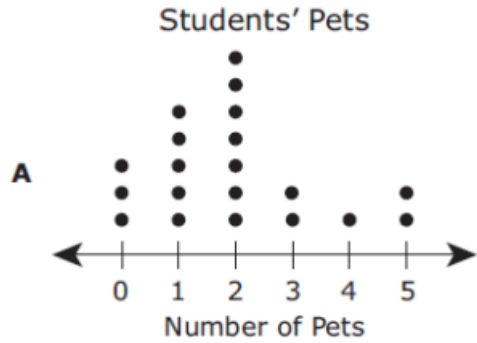
D 5 lb 3 oz

The table shows the number of pets that each student in Mrs. Morris’s class owns.

Students’ Pets

Number of Pets	Frequency
0	III
1	III
2	III II
3	II
4	I
5	II

Which dot plot represents the data in the table?

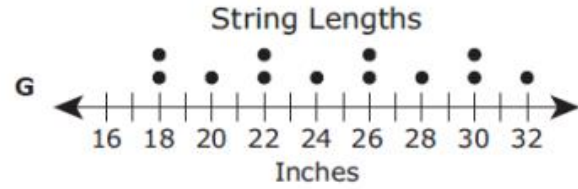
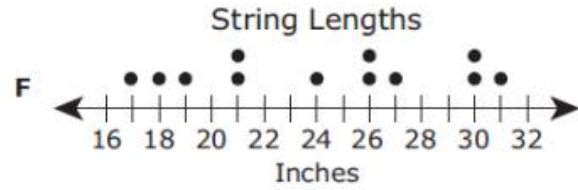


Students’ Pets

The list shows the lengths of twelve strings in inches.

26, 30, 19, 21, 24, 26, 18, 31, 27, 21, 17, 29

Which plot represents the data in the list?



H

String Lengths

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

1|8 means 18 inches.

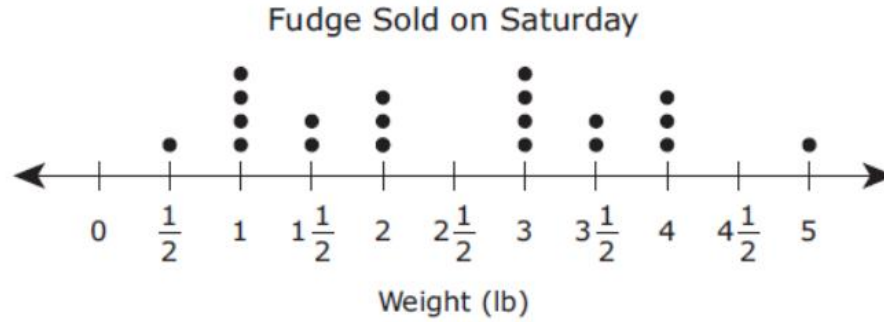
J

String Lengths

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

1|8 means 18 inches.

A candy store sells fudge by the pound. The dot plot shows the number of customers who bought different numbers of pounds of fudge on Saturday.



Which frequency table represents the same data shown on the dot plot?

Fudge Sold on Saturday

Weight (lb)	$\frac{1}{2}$	1	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	$4\frac{1}{2}$	5
Tally	I	IIII	II	III		IIII	II	III		I

Fudge Sold on Saturday

Weight (lb)	$\frac{1}{2}$	1	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	$4\frac{1}{2}$	5
Tally	I	IIII	II	III	I	IIII	II	III	I	I

Fudge Sold on Saturday

Weight (lb)	1	4	2	3	0	4	2	3	0	1
Tally	I	IIII	II	III		IIII	II	III		I

Fudge Sold on Saturday

Weight (lb)	$\frac{1}{2}$	1	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	$4\frac{1}{2}$	5
Tally	I	IIII	II	III	IIII	II	III	I		

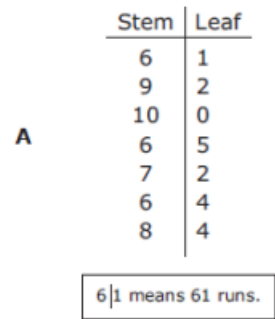
The table shows the total numbers of runs different baseball teams scored in one season.

Baseball Runs Scored

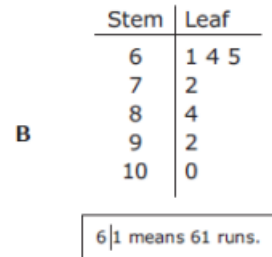
Team	Total Number of Runs Scored
R	61
S	92
T	100
U	65
V	72
W	64
X	84

Which stem and leaf plot displays these data?

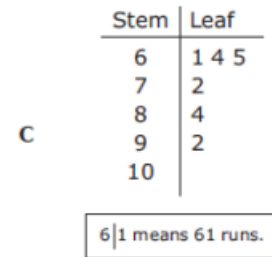
Baseball Runs Scored



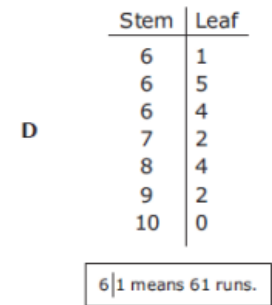
Baseball Runs Scored



Baseball Runs Scored



Baseball Runs Scored

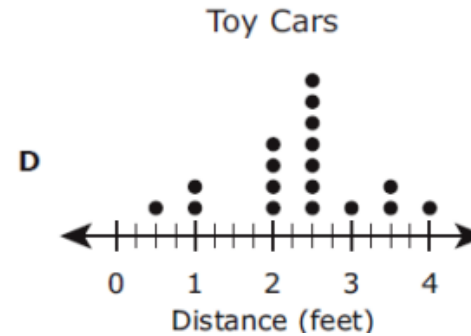
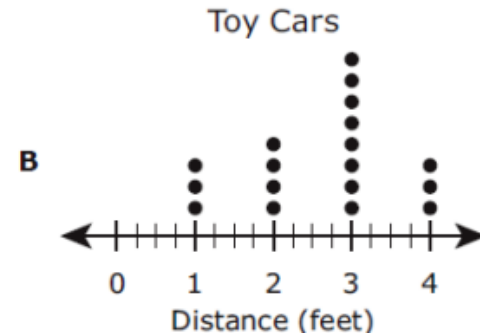
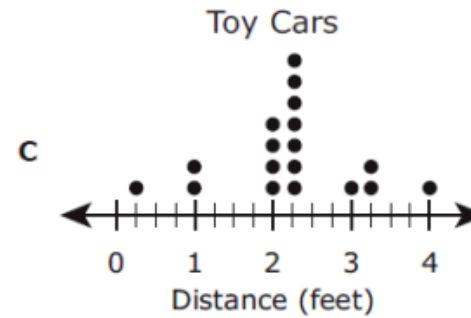
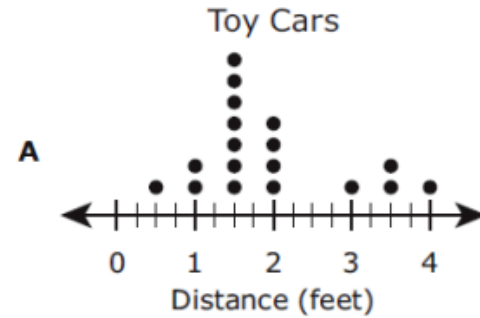


Students pushed toy cars to see how far they would roll. The table shows the number of cars that rolled different distances.

Toy Cars

Distance (feet)	$\frac{1}{2}$	1	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4
Number of Cars	1	2	0	4	7	1	2	1

Which dot plot represents the data in the table?



The frequency table shows the number of times some people visited a movie theater last year.

Movie Theater Visitors

Number of Visits	Number of People
1-5	IIII
6-10	IIII
11-15	IIII
16-20	III

Which set of data could the frequency table represent?

F 1, 2, 2, 3, 6, 7, 7, 9, 12, 12, 12, 14, 17, 18, 20

G 0, 2, 4, 5, 6, 6, 7, 8, 9, 11, 11, 13, 14, 15, 20, 20, 20

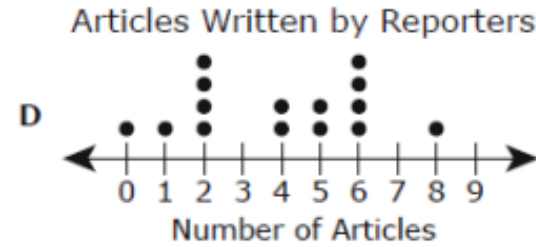
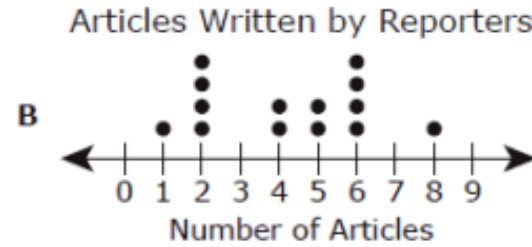
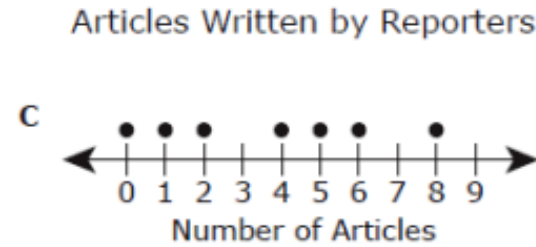
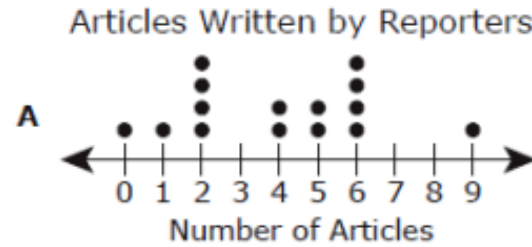
H 1, 5, 6, 10, 11, 15, 16, 20, 4, 5, 5, 3

J 2, 2, 4, 5, 6, 6, 7, 8, 9, 11, 11, 13, 14, 15, 20, 20, 20

The list shows the number of articles written by different reporters at a newspaper last month.

6, 2, 5, 2, 6, 0, 4, 6, 1, 8, 5, 2, 6, 4, 2

Which dot plot displays the same data?



The list gives information about the favorite color of each of 22 students.

- 6 students chose red.
- 2 students chose yellow.
- 5 more students chose blue than yellow.
- 3 fewer students chose purple than red.
- The rest of the students chose green.

Which frequency table represents the number of students who chose each color?

Favorite Color

Color	Number of Students
Red	
Yellow	
Blue	
Purple	
Green	

Favorite Color

Color	Number of Students
Red	
Yellow	
Blue	
Purple	
Green	

Favorite Color

Color	Number of Students
Red	
Yellow	
Blue	
Purple	
Green	

Favorite Color

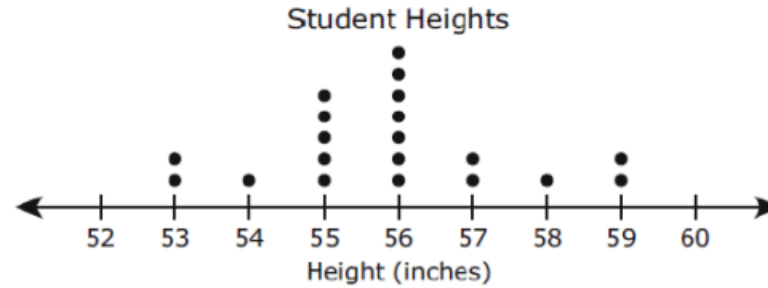
Color	Number of Students
Red	
Yellow	
Blue	
Purple	
Green	

The table shows the heights in inches of the students in Mr. Garrison's class.

Student Heights

Height (inches)	Number of Students
53	
54	
55	
56	
57	
58	
59	

Mr. Garrison made this dot plot to show the heights of his students. The dot plot is incomplete.



What height in inches is missing a data point on the dot plot?

The list shows the number of points scored by each student playing a math game.

3, 1, 5, 0, 3, 3, 3, 1, 3

Which frequency table represents all of the data in the list?

Math Game

Number of Points	Number of Students
0	
1	
2	
3	
4	
5	

F

Math Game

Number of Points	Number of Students
0	
1	
2	
3	
4	
5	

G

Math Game

Number of Points	Number of Students
0	
1	
2	
3	
4	
5	

H

Math Game

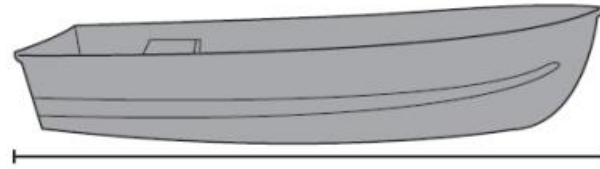
Number of Points	Number of Students
0	
1	
2	
3	
4	
5	

J

The list shows the lengths in centimeters of some toy boats. The length of one toy boat is missing.

5, 5, 6, 10, 8, 5,

The toy boat that still needs to be measured is shown. Use the ruler provided to measure the length of the toy boat to the nearest centimeter.



Which dot plot represents the lengths of all of the toy boats?

