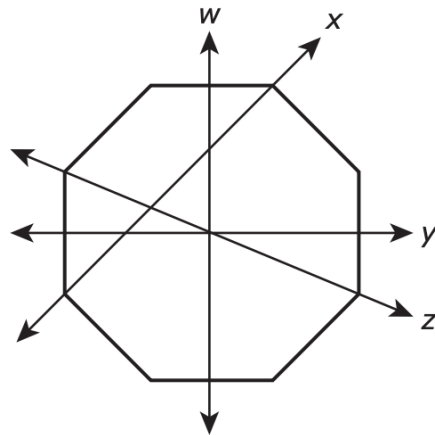


The drawing shows four lines through a figure.

Three of the lines are lines of symmetry.

Which line does NOT appear to be a line of symmetry for this figure?



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

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

What is this number written in standard form?

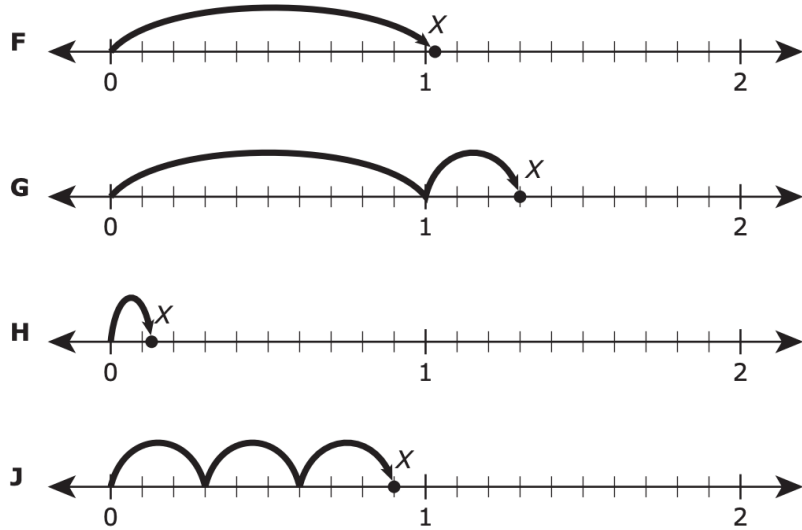
- A** 860,000
- B** 86,000
- C** 806,000
- D** 8,006,000

What fraction belongs in the  $\_$  to make this comparison true?

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

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

On which number line is point  $X$  located a distance of 1.3 units from zero?



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

- A**  $23.5 = 23 \frac{5}{100}$
- B**  $23.55 = 23 \frac{55}{10}$
- C**  $23.05 = 23 \frac{5}{10}$
- D**  $23.5 = 23 \frac{50}{100}$

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.

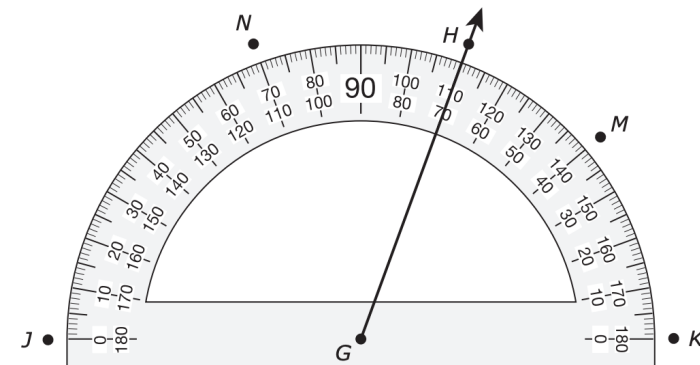
Which shape can be the one Maribel drew?

- A** Trapezoid
- B** Rhombus
- C** Square
- D** Rectangle

Ray GH has been drawn on the protractor, as shown.

To construct an angle that has a measure of  $70^\circ$ , another ray can be drawn that starts at point G and passes through \_.

- A** point J
- B** point K
- C** point M
- D** point N



Which type of triangle has perpendicular sides?

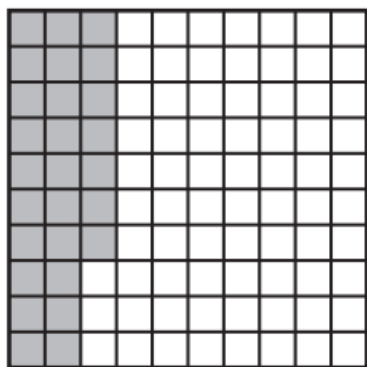
- A** An obtuse triangle
- B** An acute triangle
- C** A right triangle
- D** None of these

What is the value of 238,855 when rounded to the nearest thousand?

The model is shaded to represent a decimal number less than one.

Which value is represented by the shaded part of the model?

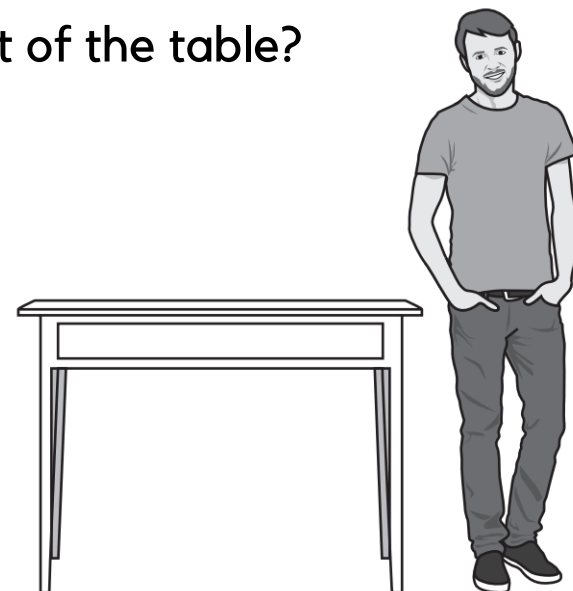
- A** Two and seven-tenths
- B** Twenty-seven
- C** Twenty-seven-hundredths
- D** Two and seven-hundredths



A man is standing next to a table.

Which measurement best describes the height of the table?

- A** 3 meters
- B** 3 centimeters
- C** 3 feet
- D** 3 inches



Della wrote a number:

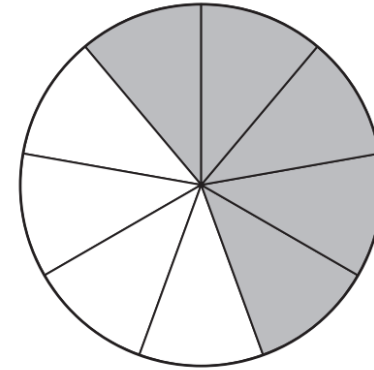
- \* The digit in the hundredths place is a 4.
- \* The digit in the thousands place is a 7.
- \* The digit in the tenths place is a 2.

Which number could be the number Della wrote?

- A** 537,106.24
- B** 17,420
- C** 27,389.04
- D** 70.24

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?



This chart shows four comparisons.

Which of these comparisons are true?

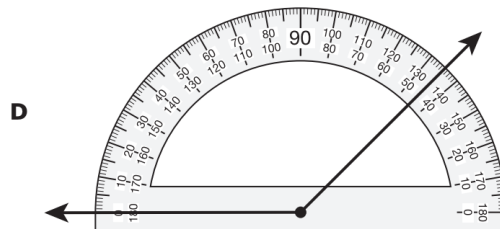
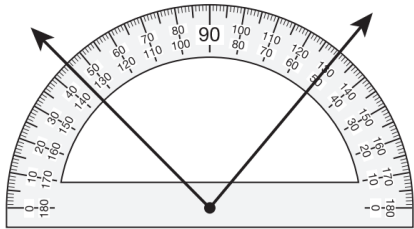
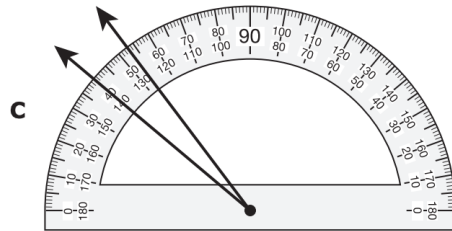
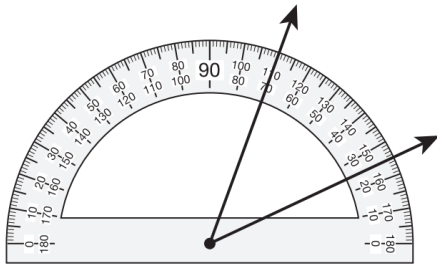
- A** Only W
- B** Only X and Z
- C** Only W, Y, and Z
- D** None of these

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

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

- A**  $18\frac{7}{100}$
- B**  $\frac{18}{70}$
- C**  $18\frac{7}{10}$
- D**  $\frac{187}{100}$

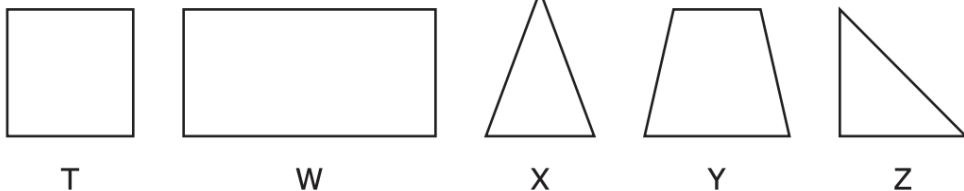
Which angle has a measure closest to  $45^\circ$ ?



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



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?

**F**

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	

**G**

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

**J**

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

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

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

- A**  $- 9$
- B**  $\times 10$
- C**  $\times 4$
- D**  $+ 9$

Number Machine

Input	Output
1	10
2	11
3	12
4	13

Jon put a pie in the oven at 5:15 P.M. He took the pie out of the oven 35 minutes later.

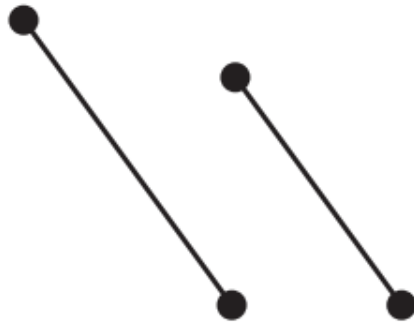
At what time did Jon take the pie out of the oven?

A town had three and fourteen-hundredths inches of rain during June.

What is the value of the digit in the tenths place?

- A** 3
- B** 0.04
- C** 0
- D** 0.10

A drawing is shown.



What does the drawing show?

- A** Two line segments that appear to be parallel
- B** Two line segments that appear to be perpendicular
- C** Two lines that appear to be parallel
- D** Two lines that appear to intersect

A store sells bags of potato chips.

- \*  $\frac{1}{3}$  of the bags are barbecue-flavored chips.
- \*  $\frac{3}{5}$  of the bags are cheese-flavored chips.
- \* The rest of the bags are plain chips.

Which statement is true?

- A** More than  $\frac{1}{2}$  of the bags are plain chips.
- B** There are no bags of plain chips.
- C** Exactly  $\frac{1}{2}$  of the bags are plain chips.
- D** Less than  $\frac{1}{2}$  of the bags are plain chips.

The list shows the numbers of books donated to a library on fourteen days.

0, 1, 4, 4, 6, 7, 8, 8, 9, 12, 12, 16, 16, 17

The librarian made this frequency table to show the data. The frequency table is not complete.

Which row of the frequency table is incomplete?

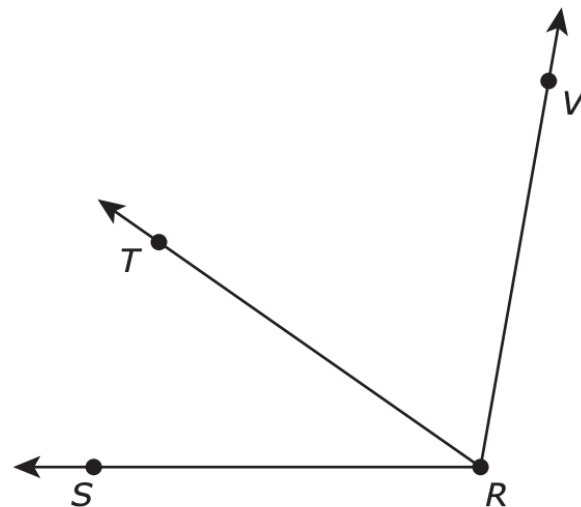
- A** The row showing 0 to 4 books
- B** The row showing 5 to 9 books
- C** The row showing 10 to 14 books
- D** The row showing 15 to 19 books

Books Donated to the Library Each Day

Number of Books	Number of Days
0 to 4	
5 to 9	<del>    </del>
10 to 14	
15 to 19	

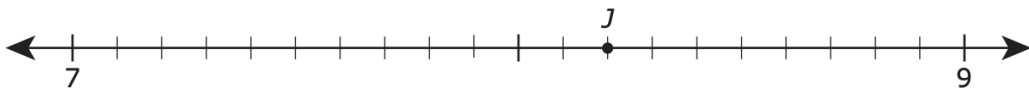
Angle SRT has a measure of  $35^\circ$ . Angle TRV has a measure of  $65^\circ$ .

What is the measure in degrees of angle SRV?



Point J is shown on the number line.

Which number does point J represent?



- A** 8.02
- B** 8.2
- C** 7.12
- D** 7.13

Trina lives in an apartment. The table shows some of the expenses that Trina paid for three months to live in the apartment.

Which expenses were variable expenses for Trina during these three months?

Monthly Expenses

Expenses	January	February	March
Rent	\$1,500.00	\$1,500.00	\$1,500.00
Water	\$32.67	\$28.24	\$38.15
Electricity	\$118.92	\$98.72	\$84.53
Cable TV	\$78.75	\$78.75	\$78.75

- A** Water and Electricity only
- B** Rent, Water, and Electricity
- C** Rent and Cable TV only
- D** Cable TV only

Four people are mowing their lawns. The table shows the fraction of each lawn that has already been mowed by each person.

Which of these people have mowed greater than  $\frac{3}{4}$  of a lawn?

- A Nate, Rudy, Marc, and Santos
- B Nate and Marc only
- C Rudy only
- D Santos only

Lawns Mowed

Person	Amount of Lawn Already Mowed
Nate	$\frac{10}{15}$
Rudy	$\frac{5}{6}$
Marc	$\frac{12}{18}$
Santos	$\frac{6}{8}$

What decimal number is equivalent to  $\frac{18}{10}$ ?

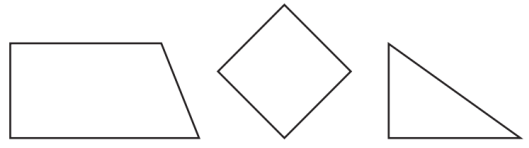
The blank model shown can be shaded to represent  $\frac{7}{10}$ .

Which expression does NOT show a way to represent  $\frac{7}{10}$  as a sum of fractions?


- A  $\frac{2}{10} + \frac{2}{10} + \frac{2}{10} + \frac{1}{10}$
- B  $\frac{4}{10} + \frac{3}{10} + \frac{3}{10}$
- C  $\frac{6}{10} + \frac{1}{10}$
- D  $\frac{1}{10} + \frac{1}{10} + \frac{1}{10} + \frac{1}{10} + \frac{1}{10} + \frac{1}{10} + \frac{1}{10}$

Deon sorted figures into groups. The figures shown were sorted into the same group.

Which statement best describes the figures in this group?



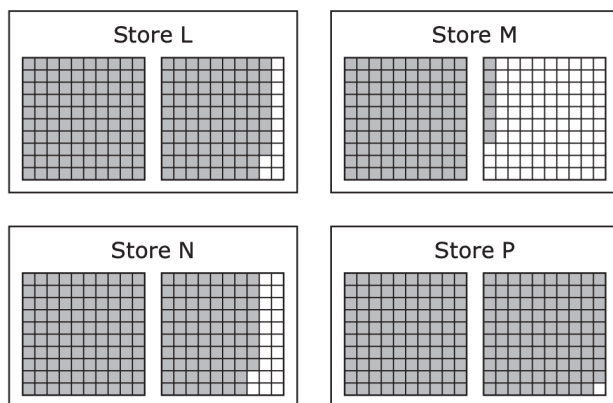
- A Each figure has only one obtuse angle.
- B Each figure has at least one acute angle.
- C Each figure has only one pair of parallel sides.
- D Each figure has at least one pair of perpendicular sides.



The models represent the price for a pound of grapes at four different stores. Each model is shaded to represent a price that is greater than \$1.00.

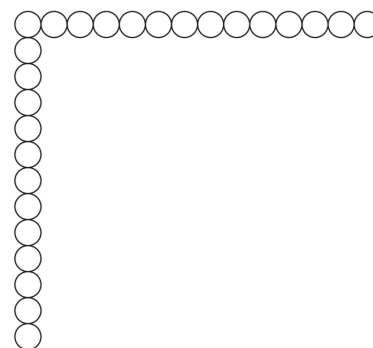
Which stores have a price greater than \$1.60 but less than \$1.90 for a pound of grapes?

- A Store L, Store N, and Store P only
- B Store L, Store M, and Store N only
- C Store L and Store N only
- D None of these



Lori started to draw an array to help her solve a math problem. She drew one full row and one full column of the array, as shown.

She finished drawing the array correctly. Which equation represents a problem Lori could solve using this array?



- A  $12 \times 13 = 156$
- B  $13 \times 13 = 169$
- C  $14 \times 12 = 168$
- D  $13 \times 14 = 182$

Ms. Panvini gave her students a test with twenty math problems. The table shows the fraction of correct answers for each of the five students who finished the test first.

Math Test

Student	Correct Answers
1	$\frac{17}{20}$
2	$\frac{1}{2}$
3	$\frac{9}{10}$
4	$\frac{4}{5}$
5	$\frac{3}{4}$

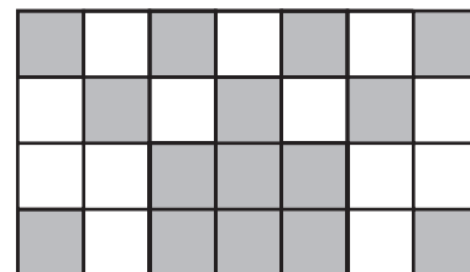
Which comparison is true?

- A  $9/10 < 4/5$
- B  $17/20 < 9/10$
- C  $9/10 < 3/4$
- D  $17/20 < 1/2$

A gardener planted 28 bushes in 4 rows. All of the bushes were either rose bushes or lilac bushes. The shaded part of the model represent the lilac bushes.

Which equation shows how to find the fraction of the bushes that are lilac bushes?

- A  $4/28 + 3/28 + 3/28 + 5/28 = 15/28$
- B  $3/28 + 4/28 + 4/28 + 2/28 = 13/18$
- C  $4/7 + 3/7 + 3/7 + 5/7 = 15/28$
- D  $15/28 + 13/28 = 28/28$



Yolanda wrote a number.

- \* The digit in the millions place is an 8.
- \* The digit in the thousands place is a 6.
- \* The digit in the hundredths place is a 2.

Which number could be the number Yolanda wrote?

- A** 85,346,000.12
- B** 38,056,000.21
- C** 58,346,000.12
- D** 98,674,200.21

The list shows the numbers of points a basketball team scored during the games the team played last season.

83, 98, 104, 88, 95, 98, 101, 89, 92, 89

The stem and leaf plot also shows this data.

What number goes in the box to complete the stem and leaf plot?

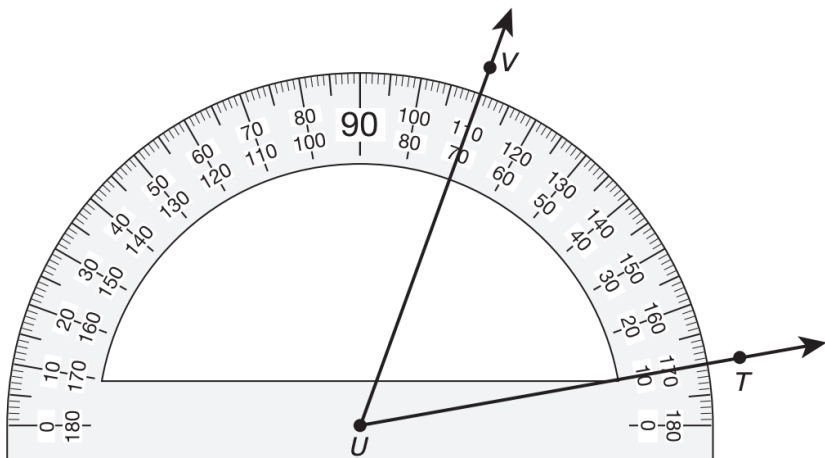
Points Scored

Stem	Leaf
8	3 8 9 9
9	<input type="text"/> 5 8 8
10	1 4

|8 means 98 points.

Angle TUV is shown on the protractor.

What is the measure of Angle TUV to the nearest degree?



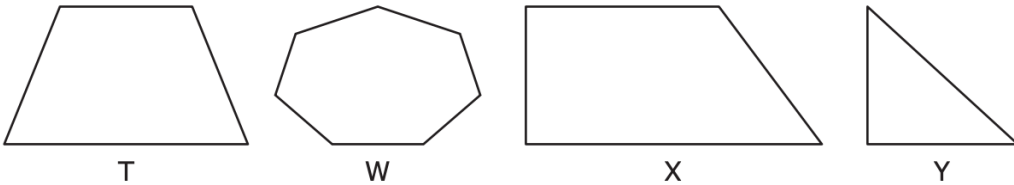
Which of these statements describe the primary services of a bank?

- I. Customers can borrow money from a bank.
- II. Customers can put money into a savings or checking account.
- III. Customers can pick up packages at a bank.
- IV. Customers can cash checks at a bank.

- A** Statements II and IV only
- B** Statements I, II, and IV only
- C** Statement III only
- D** Statements I, II, and III only

A set of figures is shown.

Which figure has at least one acute angle, right angle, and obtuse angle?



Which mixed number is equivalent to 17.04?

- A**  $17 \frac{4}{10}$
- B**  $17 \frac{1}{4}$
- C**  $17 \frac{40}{10}$
- D**  $17 \frac{4}{100}$

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

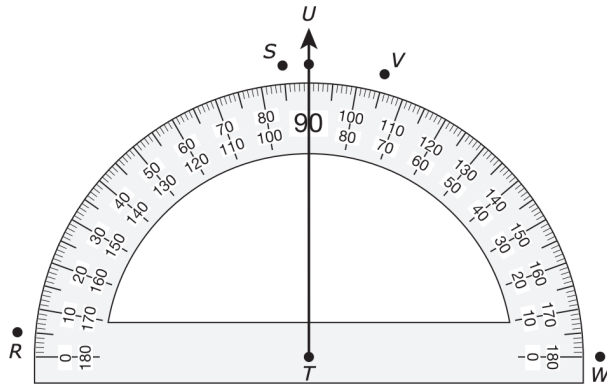
Which decimal is equivalent to  $\frac{79}{100}$ ?

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

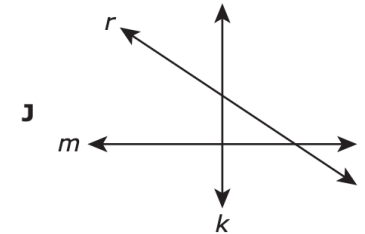
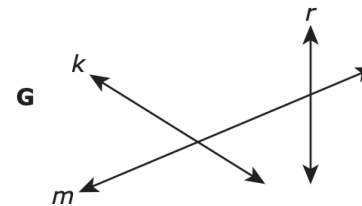
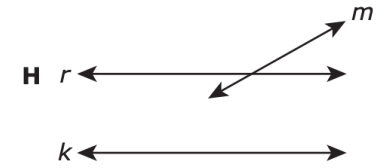
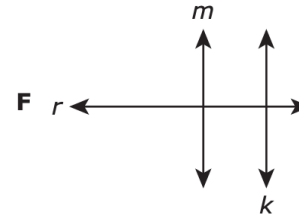
Ray TU has been drawn on the protractor, as shown.

To construct an angle that has a measure of  $85^\circ$ , another ray can be drawn that starts at point T and passes through \_\_.

- A point R
- B point S
- C point V
- D point W



In which drawing does line m appear to be perpendicular to line k?



Which fraction is equivalent to 1.5?

- A  $15/10$
- B  $15/100$
- C  $100/15$
- D  $10/15$

Which expression has a quotient of about 7?

- A  $7 \div 2$
- B  $23 \div 7$
- C  $36 \div 5$
- D  $13 \div 6$

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

Which model represents  $11 \times 13 = 143$ ?

