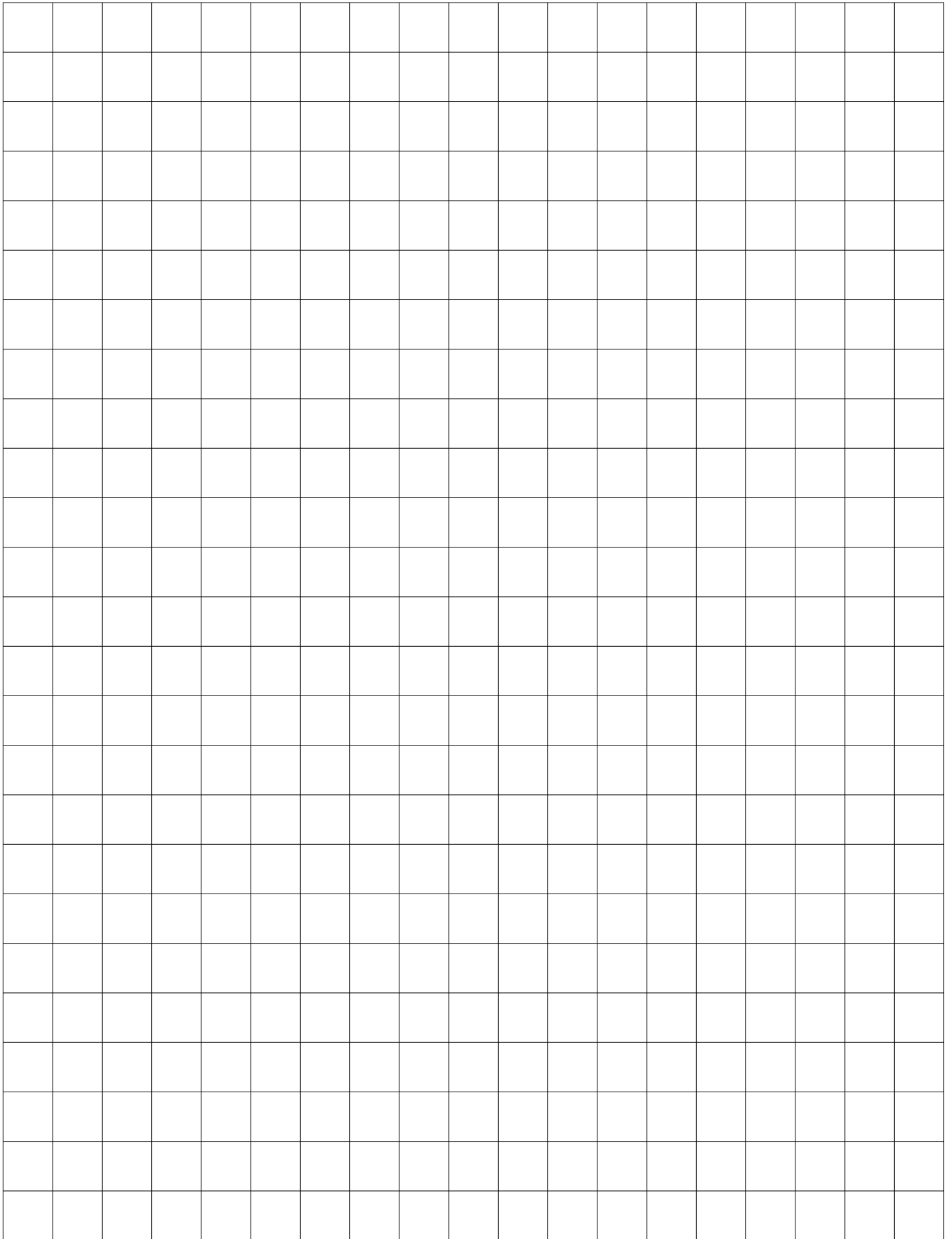


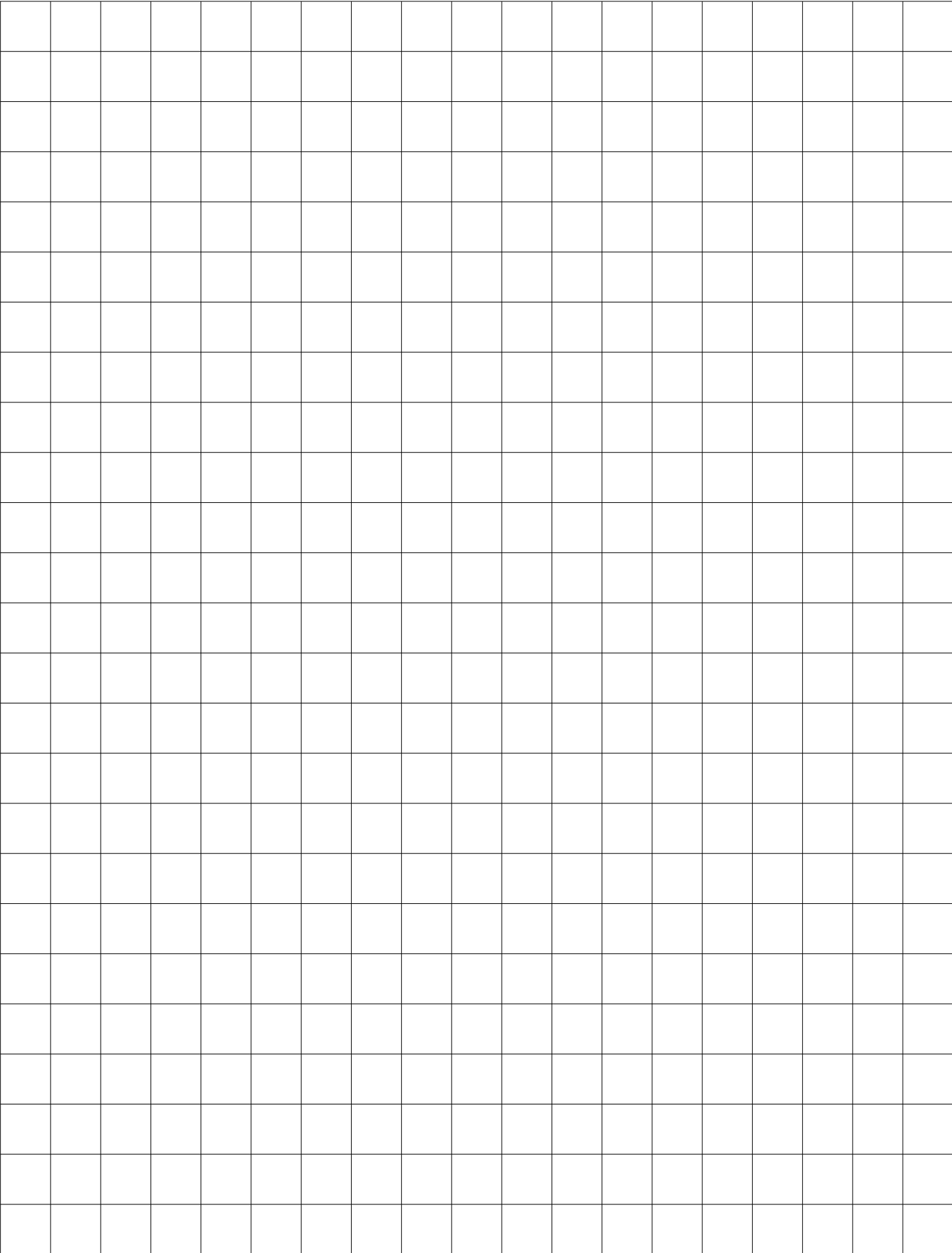


Beginning-of-Year Assessment (BOY)

Grade 4 Mathematics Standards

This BOY assessment is intended to assess current grade 5 students who completed grade 4 mathematics in the 2019-2020 school year.





Congratulations! You worked very hard in school to learn many new things. Taking this Grade 4 Mathematics Standards test is a great way to show your family and school what you learned. It is okay if you do not know all the answers. Just try your best. You are amazing! You are taking this test so adults can learn more about how to help you this year.

You can ask an adult for help if you do not understand the directions. Make sure you have the reference material with the rulers. It might help you with this test. You can also use scratch paper and graph paper for this test.

If you do not know the answer to a question, choose the answer you think might be correct. You must answer the questions on your own.

You are now ready to start. Take your time and remember that trying your best is what is important. You're awesome, and you'll do great!

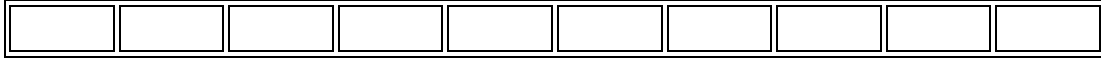


BOY Assessment Grade 4 Mathematics Standards

Student _____
Class _____
Date _____

1. Larry has written $\frac{6}{10}$ of his book report. Which decimal represents the part of the book report he has written?
- A. 6.1
 - B. 6.01
 - C. 0.6
 - D. 0.06

2. On Monday, Pete and Ted completed a total of $\frac{7}{10}$ of their group project. Pete completed $\frac{3}{10}$ of the project.



What fraction of the group project did Ted complete on Monday?

- A. $\frac{4}{10}$
- B. $\frac{4}{7}$
- C. $\frac{7}{10}$
- D. $\frac{3}{4}$
3. Rita bought three and forty-eight hundredths pounds of bananas at the store. How is this number written in expanded notation?
- A. $(3 \times 1) + (4 \times 0.1) + (8 \times 0.01)$
- B. $(3 \times 100) + (4 \times 10) + (8 \times 1)$
- C. $(3 \times 1) + (4 \times 0.01) + (8 \times 0.1)$
- D. $(3 \times 100) + (4 \times 0.1) + (8 \times 0.01)$

4. The stem and leaf plot shows the scores given to the dogs at a dog show. Possible scores were between 0.1 and 5.0.

Dog Show Scores

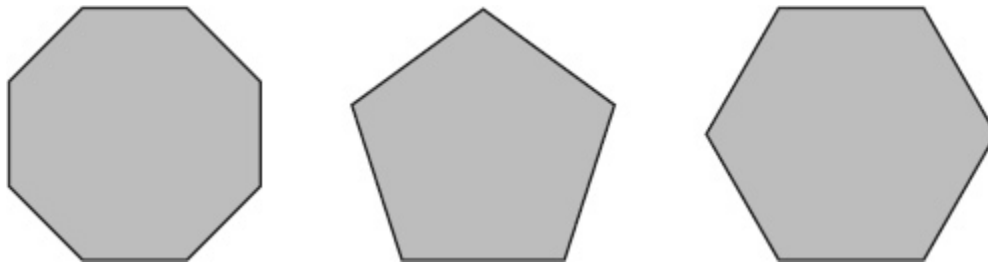
Stem	Leaf
0	8
1	2 5
2	2 4 8
3	0 3 3 6 8
4	0 5 5

1|5 means a score of 1.5.

What is the difference between the highest score and the lowest score shown in the stem and leaf plot?

- A. 4.3
- B. 3.7
- C. 0.25
- D. 0.47

5. 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

6. 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

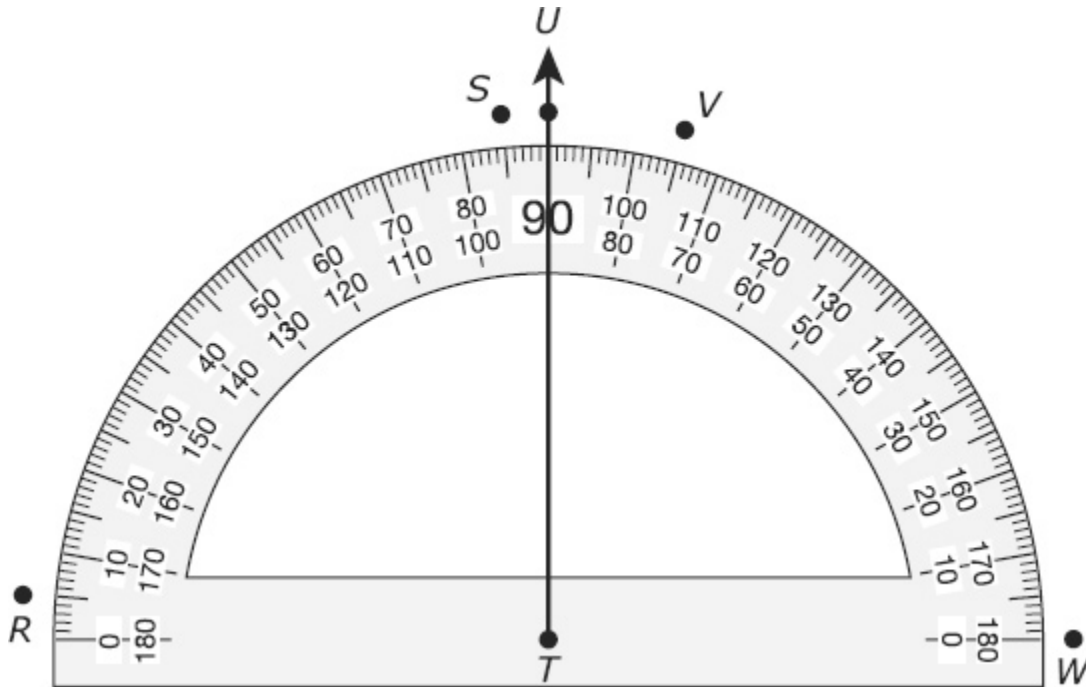
What is the difference in meters between the length of Line S and the length of Line P?

- A. 7.57 m
 - B. 5.95 m
 - C. 3.70 m
 - D. 6.15 m
7. Which statement best describes a primary service of a bank?
- A. Banks offer checking and savings accounts to their customers.
 - B. Banks help customers decide which expenses to pay.
 - C. Banks help customers meet their neighbors.
 - D. Banks sell stamps and deliver mail.

8. Scott traveled 557 miles to visit his cousin. What is this number rounded to the nearest ten?

Record your answer by filling in the bubbles. Be sure to use the correct place value.

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



To construct an angle that has a measure of 85° , 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

10. 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?

A. $\frac{2}{4} > \frac{4}{8}$

B. $\frac{4}{8} < \frac{5}{10}$

C. $\frac{5}{6} > \frac{4}{8}$

D. $\frac{5}{6} < \frac{5}{10}$

11. 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

B.

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

C.

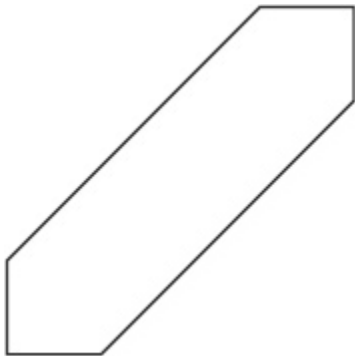
Position	Expression	Value
1	$1 + 37$	38
2	$2 + 36$	38
3	$3 + 35$	38
4	$4 + 34$	38

D.

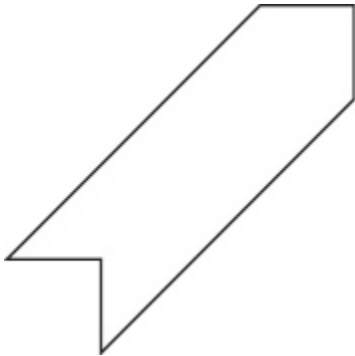
Position	Expression	Value
1	$1 + 38$	39
2	$2 + 38$	40
3	$3 + 38$	41
4	$4 + 38$	42

12. Which figure appears to have exactly 1 line of symmetry?

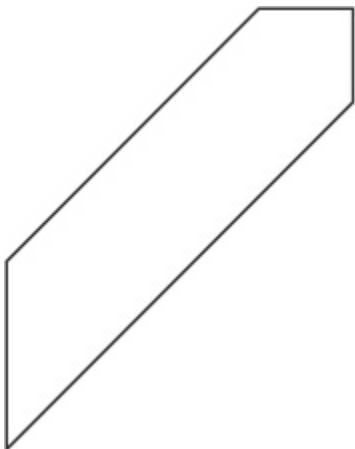
A.



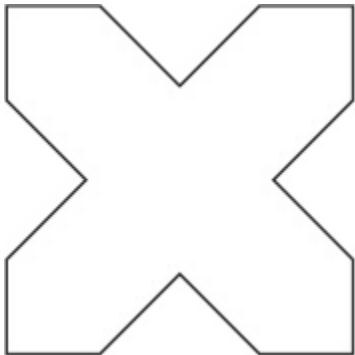
B.



C.



D.



13. Which fraction is equivalent to 1.5?

A. $\frac{15}{10}$

B. $\frac{15}{100}$

C. $\frac{100}{15}$

D. $\frac{10}{15}$

14. 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

15. 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?
- A. $x = 400 + 400 + 125$
 - B. $x = 400 + 125$
 - C. $x = 400 + 400 - 125$
 - D. $x = 400 - 125$
16. A stadium sold 33,300 tickets to a concert. Which statement about this number is true?
- A. The value of the digit in the tens place is 10 times the value of the digit in the hundreds place.
 - B. The value of the digit in the thousands place is $\frac{1}{10}$ the value of the digit in the ten thousands place.
 - C. The value of the digit in the hundreds place is 10 times the value of the digit in the thousands place.
 - D. The value of the digit in the ten thousands place is $\frac{1}{10}$ the value of the digit in the hundreds place.

17. The table shows different numbers of feet and the equivalent numbers of yards.

Equivalent Distances

Number of Yards	Number of Feet
5	15
15	45
25	75
35	105

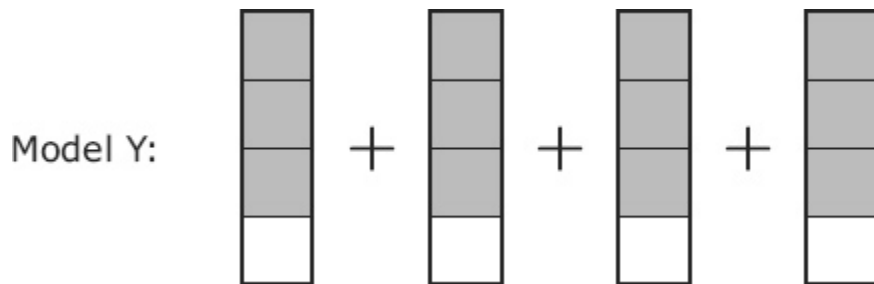
Joey walked 333 feet. How many yards did Joey walk?

- A. 999 yd
- B. 363 yd
- C. 111 yd
- D. 193 yd

18. The model is shaded to represent one whole.



Model Y is shaded to represent a number greater than one.



Which expression CANNOT be used to represent this number?

A. $\frac{4}{4} + \frac{4}{4} + \frac{4}{4}$

B. $\frac{1}{4} + \frac{1}{4} + \frac{1}{4} + \frac{1}{4}$

C. $\frac{4}{4} + \frac{4}{4} + \frac{3}{4} + \frac{1}{4}$

D. $\frac{3}{4} + \frac{3}{4} + \frac{3}{4} + \frac{3}{4}$

19. 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?

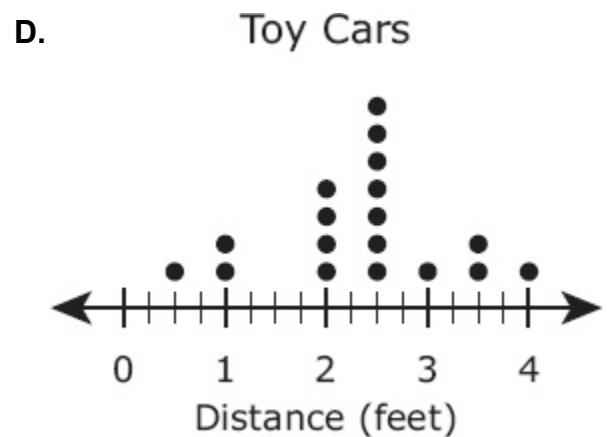
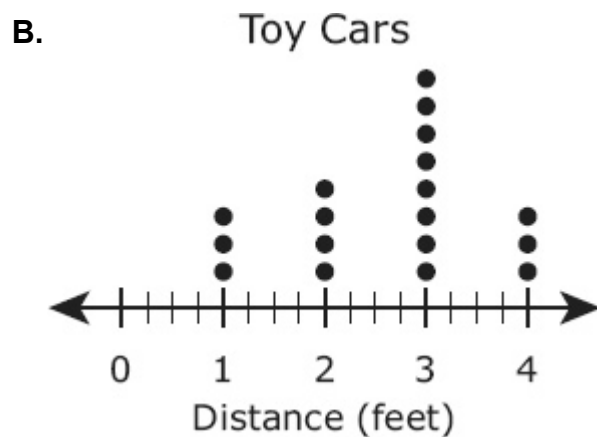
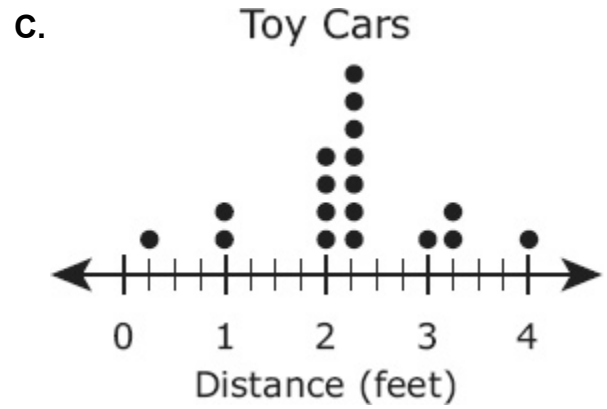
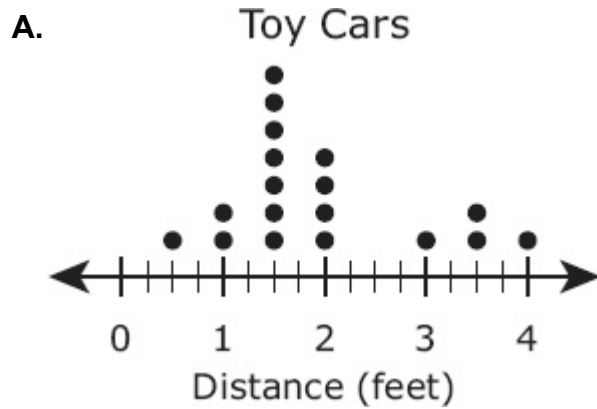
Record your answer by filling in the bubbles. Be sure to use the correct place value.

20. 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?



21. The coaches at Xavier Elementary School bought cases of sports drinks for a field day. They bought 76 cases of drinks. Each case contained 24 drinks. All the drinks were given out to students. Each student received 3 sports drinks.

How many students received sports drinks?

- A. 5,472
- B. 300
- C. 1,824
- D. 608

22. An office had three baskets of letters ready to be mailed. The first basket was $\frac{2}{10}$ full, the second basket was $\frac{3}{6}$ full, and the third basket was $\frac{1}{5}$ full.

Which comparison is true?

- A. $\frac{1}{5} > \frac{3}{6}$
- B. $\frac{2}{10} = \frac{1}{5}$
- C. $\frac{3}{6} < \frac{2}{10}$
- D. $\frac{1}{5} > \frac{2}{10}$

23. 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?

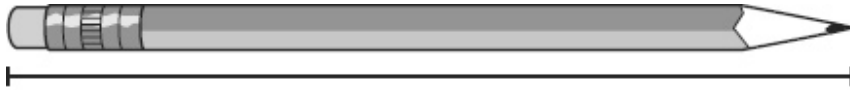
A. $2 \times 45 + 5 = f$

B. $2 \times 45 - 5 = f$

C. $2 + 45 \times 5 = f$

D. $2 + 45 + 5 = f$

24. Armando has two pencils in his desk. Use the ruler to measure the length of each pencil to the nearest centimeter.



Which measurement is closest to the difference in centimeters between the lengths of these two pencils?

A. 9 cm

B. 1 cm

C. 23 cm

D. 3 cm

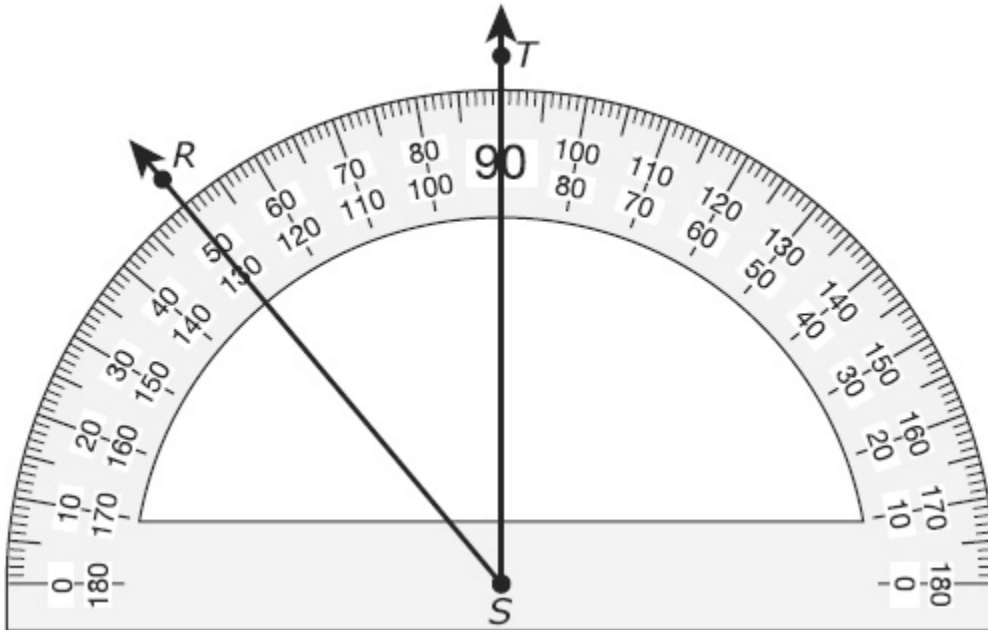
25. Greg sorted his collection of baseball cards.

- Greg will give $\frac{1}{5}$ of his collection to his brother.
- Greg will sell $\frac{4}{10}$ of his collection to a card shop.

Which statement is true?

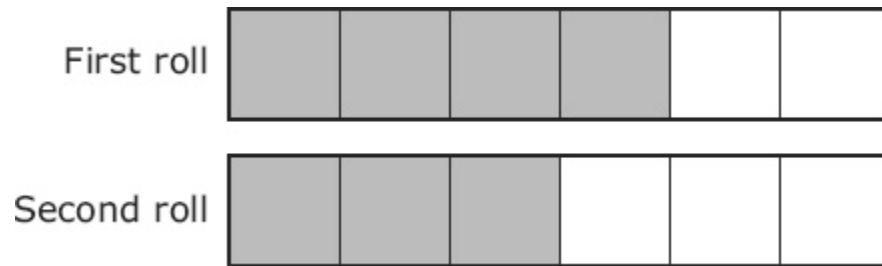
- A.** Greg will have exactly half his collection left.
- B.** Greg will sell more than half his collection to a card shop.
- C.** Greg will have less than half his collection left.
- D.** Greg will give more than half his collection to his brother.

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



- A. 40°
- B. 50°
- C. 130°
- D. 80°

27. 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. $1\frac{1}{6}$

28. 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?

A. $100,000,000 + 40,000,000 + 5,000,000 + 700,000 + 80,000$

B. $100,000,000 + 40,000,000 + 500,000 + 70,000 + 8,000$

C. $10,000,000 + 4,000,000 + 500,000 + 70,000 + 8,000$

D. $100,000,000 + 40,000,000 + 500 + 70 + 8$

29. The table shows the number of cartons of milk the school cafeteria sold each day last week.

Milk

Day	Number of Cartons Sold
Monday	352
Tuesday	426
Wednesday	449
Thursday	373
Friday	402

Which of these is the best estimate of the number of cartons of milk the cafeteria sold last week?

- A. 400
- B. 1,800
- C. 2,000
- D. 2,500

- 30.** Oscar draws two lines on his paper. The lines are always one inch apart and do not intersect.

Which term can be used to name what Oscar drew?

- A.** Perpendicular lines
 - B.** Parallel lines
 - C.** Intersecting lines
 - D.** Line segments
- 31.** 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?

Record your answer by filling in the bubbles. Be sure to use the correct place value.

32. 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?

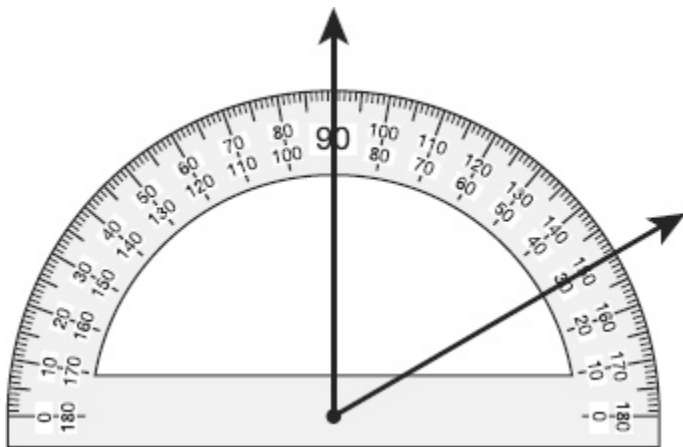
- A. 1, 2, 2, 3, 6, 7, 7, 9, 12, 12, 12, 14, 17, 18, 20
- B. 0, 2, 4, 5, 6, 6, 7, 8, 9, 11, 11, 13, 14, 15, 20, 20, 20
- C. 1, 5, 6, 10, 11, 15, 16, 20, 4, 5, 5, 3
- D. 2, 2, 4, 5, 6, 6, 7, 8, 9, 11, 11, 13, 14, 15, 20, 20, 20

33. Ms. Gonzales packs 45 boxes with limes. Each box holds 100 limes. How many limes can Ms. Gonzales pack into these boxes?

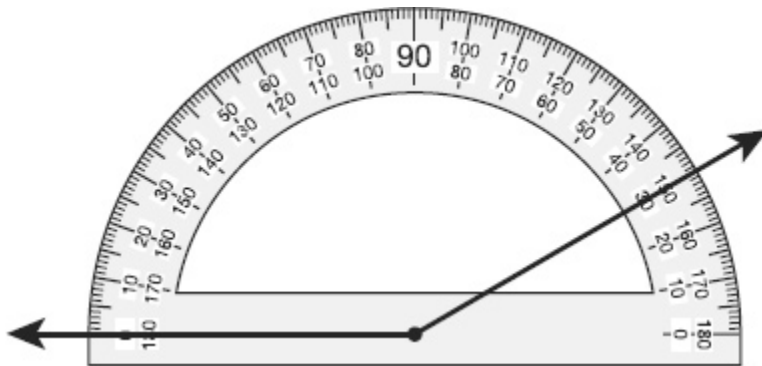
- A. 4,005
- B. 450
- C. 145
- D. 4,500

34. Which angle has a measure closest to 30° ?

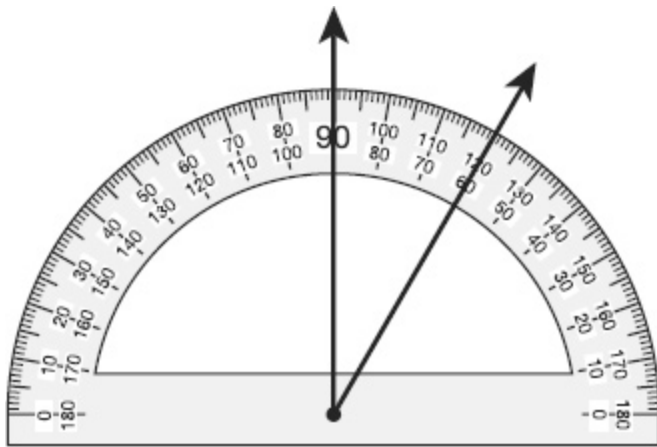
A.



B.



C.



D.

