



End-of-Year Assessment
Grade 4 Mathematics

Congratulations! You worked hard to learn many new things this school year. Taking this Grade 4 Math 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.

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!

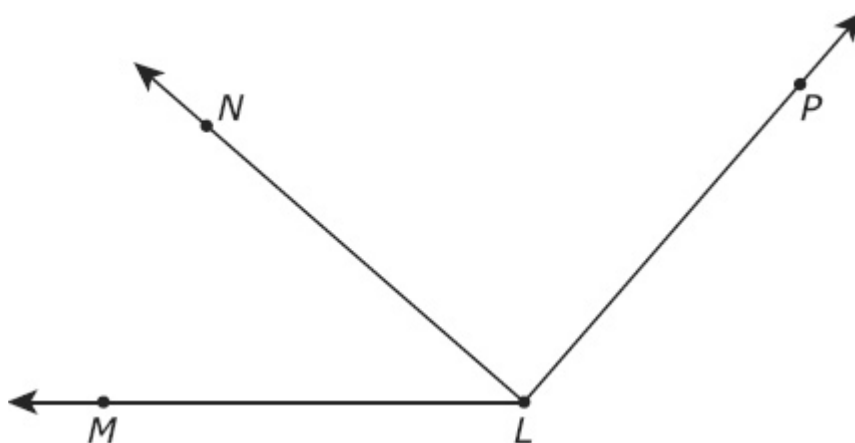
EOY Grade 4 Math

Student _____

Class _____

Date _____

1. Angle MLN has a measure of 41° . Angle NLP is a right angle.



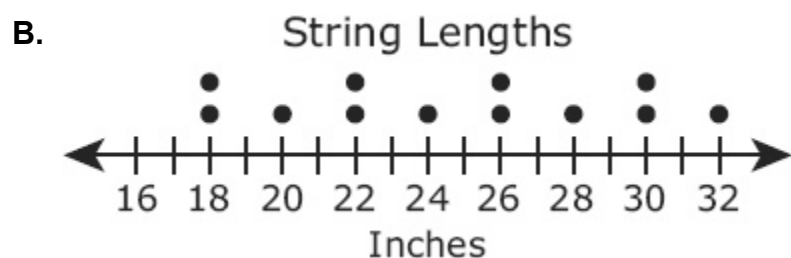
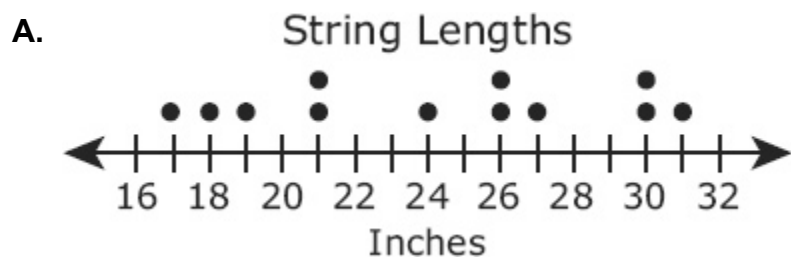
What is the measure of angle MLP ?

- A. 82°
- B. 49°
- C. 180°
- D. 131°

2. 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?



C. **String Lengths**

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

1|8 means 18 inches.

D. **String Lengths**

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

1|8 means 18 inches

3. There are 27 teams in a hockey league. There are 16 players on each team. How many players are in the hockey league?

- A. 162
- B. 189
- C. 432
- D. Not here

4. 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

5. Which figures appear to have 2 or more lines of symmetry?

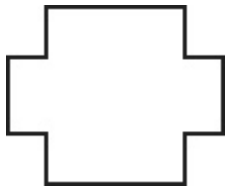


Figure K

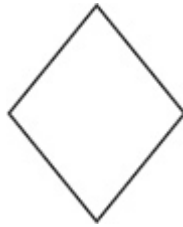


Figure L

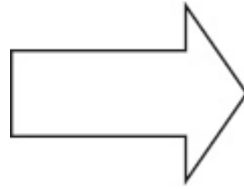


Figure M

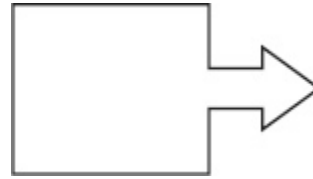


Figure N



- A. Figures K and L only
- B. Figures M and N only
- C. Figures K, L, and N only
- D. Figures K, L, M, and N

6. A number sentence is shown below.

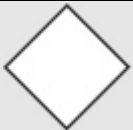

$$\diamond \times 10 = \bigcirc$$

Which table shows numbers that make the number sentence true?

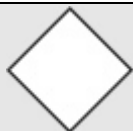

A.

	
44	54
66	76
99	109
150	160

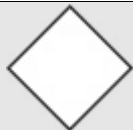

B.

	
44	440
66	660
99	990
150	1,500

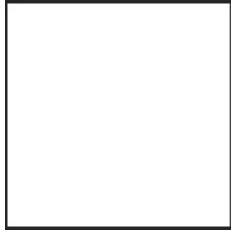
C.

	
44	4,400
66	6,600
99	9,900
150	15,000

D.

	
44	404
66	606
99	909
150	1,050

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



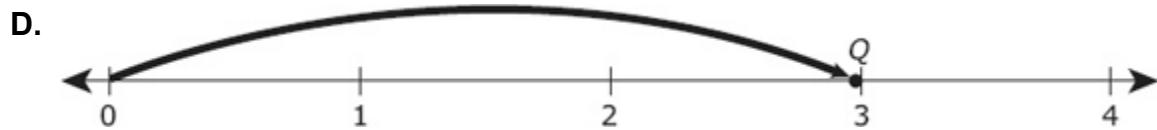
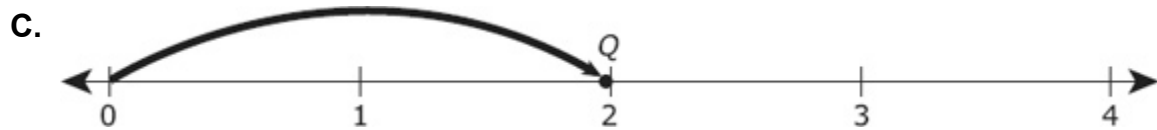
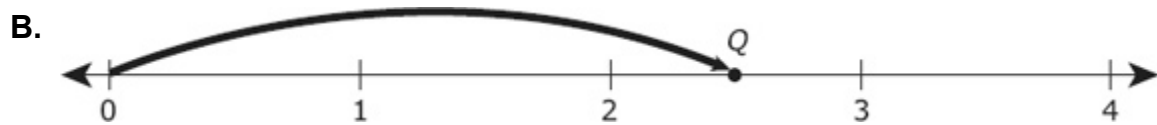
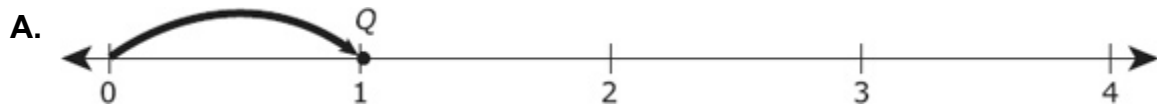
What is the difference between the perimeters of these rectangles in centimeters?

- A. 3 cm, because $6 - 3 = 3$
- B. 2 cm, because $8 - 6 = 2$
- C. 4 cm, because $16 - 12 = 4$
- D. 1 cm, because $9 - 8 = 1$
8. 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. $x = 8,917 - 7,639$

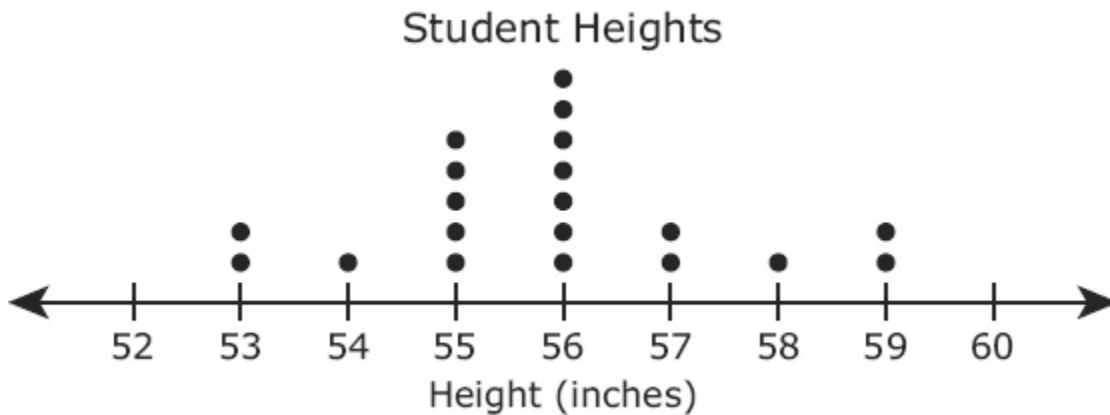
9. On which number line does point Q best represent a distance of 2.98 units from zero?



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

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?

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

11. 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?

- A. $\frac{5}{7}$, because $\frac{4}{7} + \frac{1}{7} = \frac{5}{7}$
- B. $\frac{12}{7}$, because $\frac{4}{7} + \frac{1}{7} = \frac{5}{7}$ and $\frac{7}{7} + \frac{5}{7} = \frac{12}{7}$
- C. $\frac{3}{7}$, because $\frac{4}{7} - \frac{1}{7} = \frac{3}{7}$
- D. $\frac{2}{7}$, because $\frac{4}{7} + \frac{1}{7} = \frac{5}{7}$ and $\frac{7}{7} - \frac{5}{7} = \frac{2}{7}$

12. Zoey sold snacks at a neighborhood pool. The cost of preparing the snacks was \$10.29. The money she received from the sale of the snacks was \$21.75.

What was Zoey's profit?

- A. \$32.04
- B. \$21.75
- C. \$11.46
- D. \$10.29

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

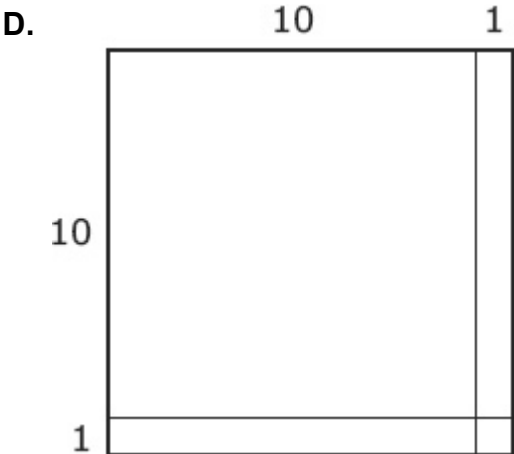
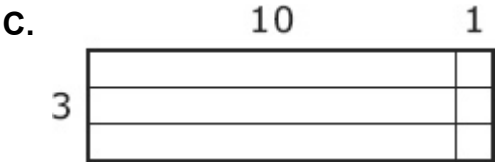
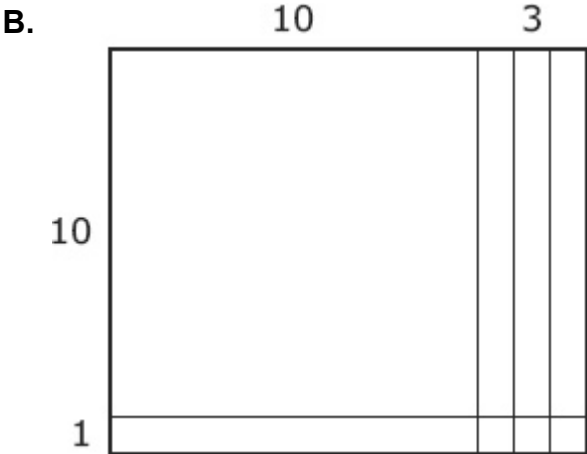
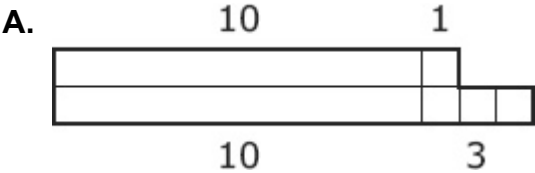
A. $(3 \times 10,000) + (7 \times 1,000) + (1 \times 100) + (5 \times 10) + (8 \times 0.1)$

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

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



15. A bag of snack mix weighs $8\frac{9}{100}$ ounces. What decimal is equivalent to $8\frac{9}{100}$?

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

16. Kristine has a \$10 bill to spend at a book fair. She buys one book for \$4.95, two bookmarks for \$0.65 each, and a key chain for \$1.85.

How much change should Kristine receive from her \$10 bill?

A. \$2.55

B. \$2.10

C. \$3.45

D. \$1.90

17. A dictionary has a mass of about 2.5 kg. Which object has a mass closest to the mass of a dictionary?

A. Bicycle

B. Pair of boots

C. Refrigerator

D. Bag of chips

18. Trevor jogged the following fractions of a mile last week.

- Monday: $\frac{3}{4}$ mile
- Tuesday: $\frac{5}{10}$ mile
- Friday: $\frac{4}{5}$ mile

Which comparison of these fractions of a mile is true?

A. $\frac{4}{5} < \frac{5}{10}$

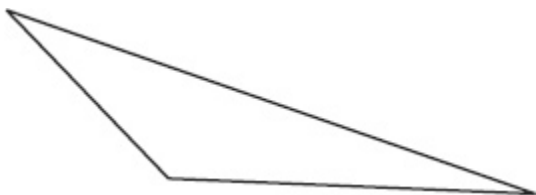
B. $\frac{4}{5} < \frac{3}{4}$

C. $\frac{3}{4} < \frac{5}{10}$

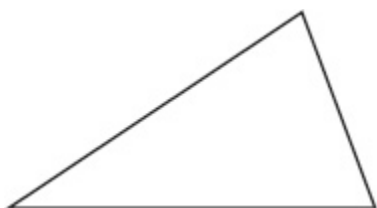
D. $\frac{3}{4} < \frac{4}{5}$

19. Which triangle appears to be an acute triangle?

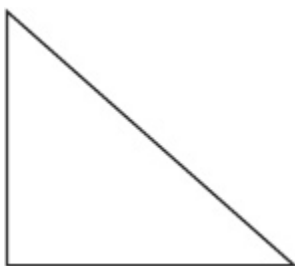
A.



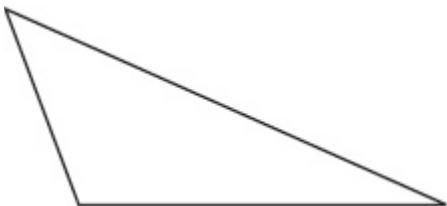
B.



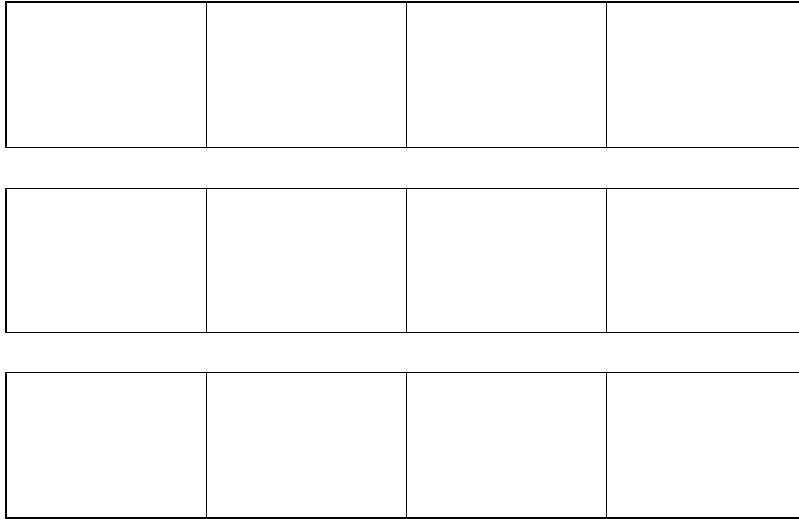
C.



D.



20. This model can be shaded to represent the fraction $\frac{7}{4}$.



Which number sentence represents two different ways that $\frac{7}{4}$ can be represented with shaded fractions on the model?

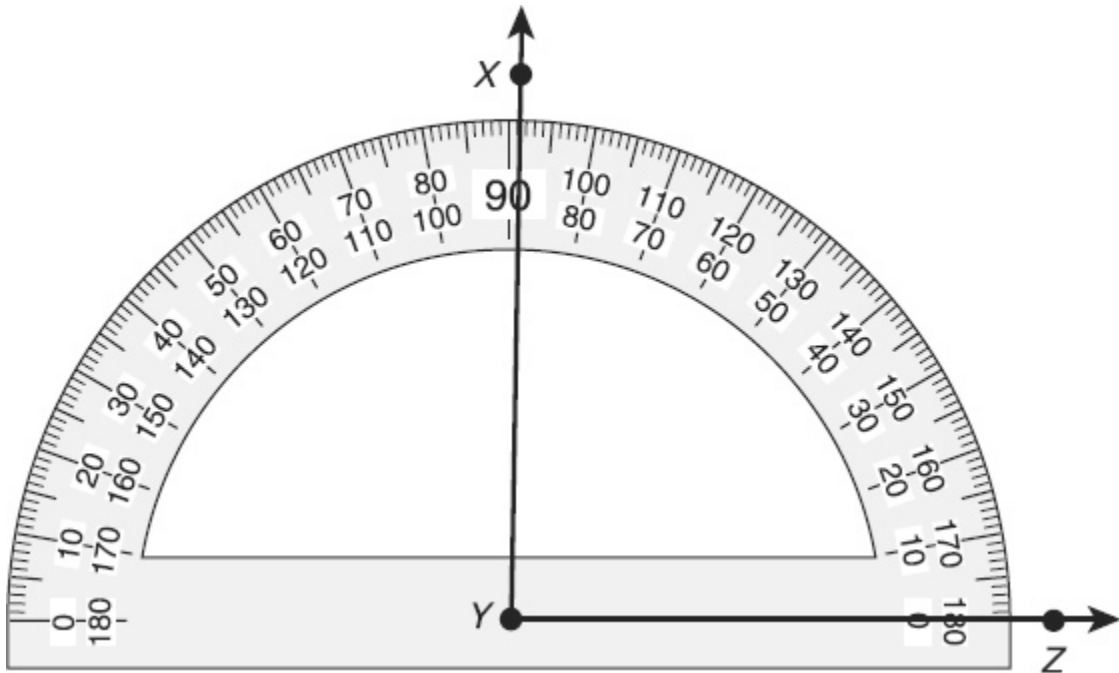
A. $\frac{2}{4} + \frac{2}{4} + \frac{3}{4} = \frac{5}{4} + \frac{2}{4}$

B. $\frac{3}{4} + \frac{4}{4} = \frac{1}{4} + \frac{4}{4} + \frac{1}{4}$

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

D. $\frac{2}{4} + \frac{3}{4} + \frac{2}{4} = \frac{7}{4} + \frac{1}{4}$

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



- A. 180°
- B. 109°
- C. 91°
- D. 89°

22. 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. $(4 \times 10) + (7 \times 1) + (0 \times 10) + (6 \times 100)$

23. Martha bought a new box of cereal. In one week she ate $\frac{4}{9}$ of the cereal.

Which is closest to the fraction of the cereal she had left?

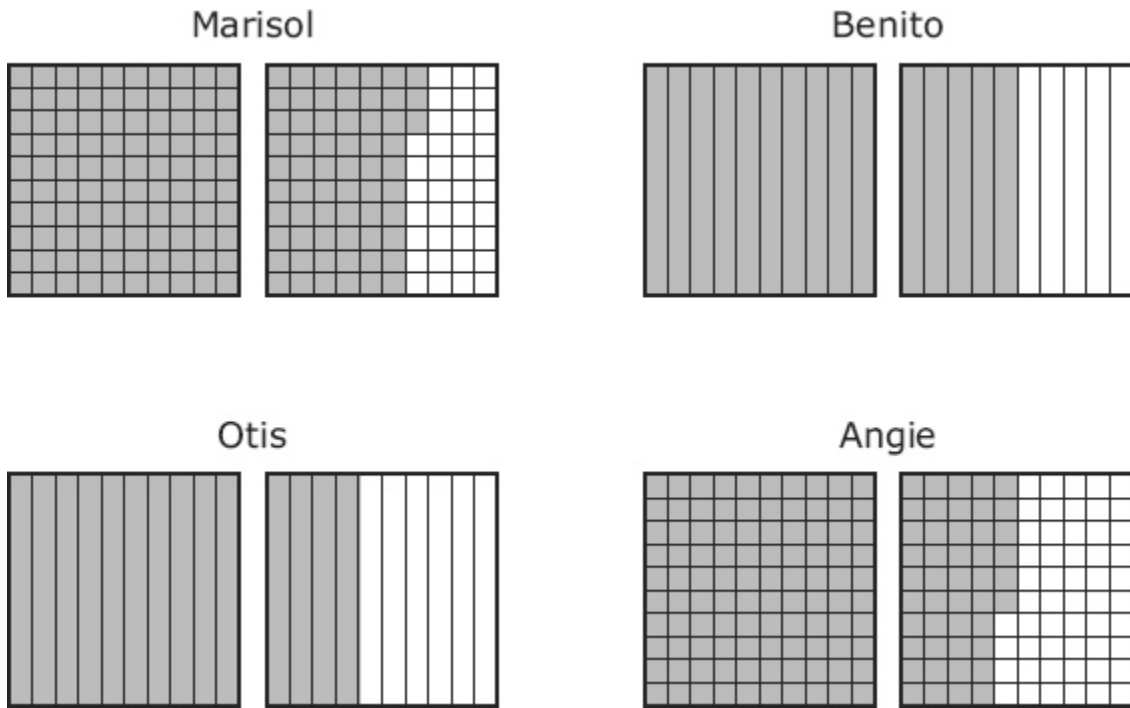
A. Less than $\frac{1}{4}$ of the cereal was left.

B. Less than $\frac{1}{2}$ of the cereal was left.

C. About $\frac{1}{2}$ of the cereal was left.

D. About $\frac{1}{4}$ of the cereal was left.

24. The distances in meters that four students jumped are modeled below.



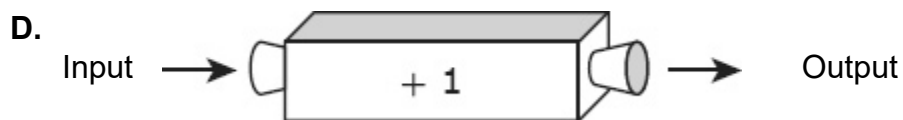
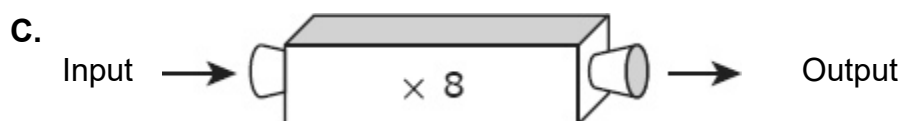
Which list shows these distances in order from greatest to least?

- A. 1.46 m 1.5 m 1.4 m 1.63 m
- B. 1.63 m 1.46 m 1.5 m 1.4 m
- C. 1.4 m 1.46 m 1.5 m 1.63 m
- D. 1.63 m 1.5 m 1.46 m 1.4 m

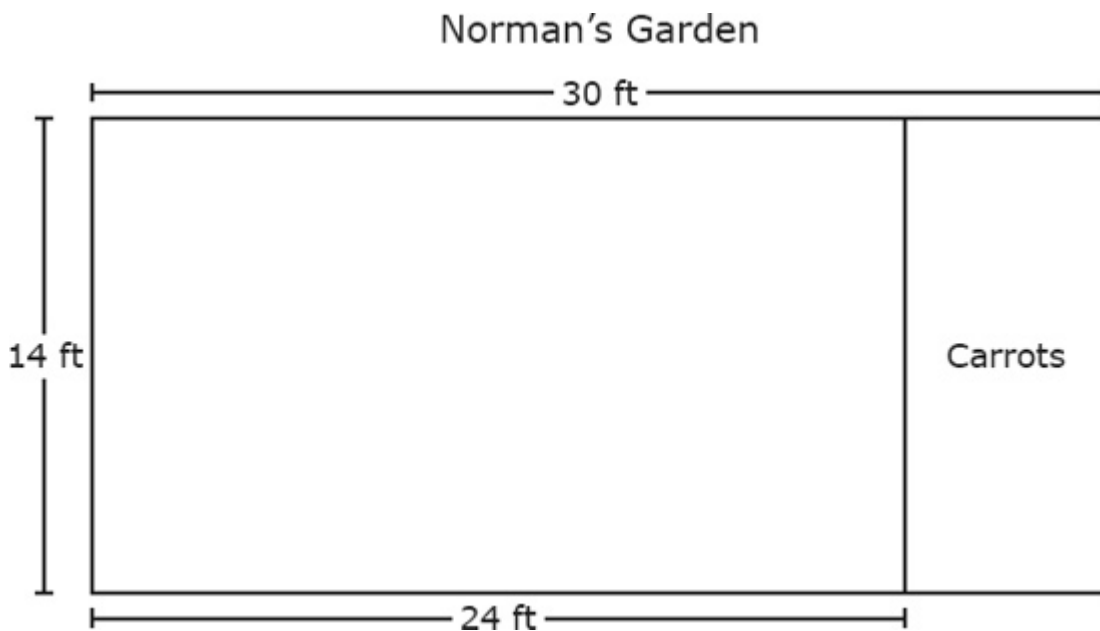
25. The table shows a relationship between the input numbers and the output numbers generated by a number machine.

Input	Output
1	15
2	16
3	17
4	18

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



26. The model represents Norman's rectangular backyard garden. Norman will plant carrots in the rectangular section of the garden labeled "Carrots" in the model.



What is the area in square feet of the section where Norman will plant carrots?

- A. 40 square feet
- B. 224 square feet
- C. 336 square feet
- D. 84 square feet

27. The number of each kind of flower in a vase is shown.



Which expression can be used to find the fraction of flowers in the vase that are daisies or tulips?

A. $\frac{6}{6} + \frac{5}{5}$

B. $\frac{4}{4} + \frac{5}{5}$

C. $\frac{6}{15} + \frac{5}{15}$

D. $\frac{4}{15} + \frac{5}{15}$

28. Which equation shows an equivalent decimal and fraction?

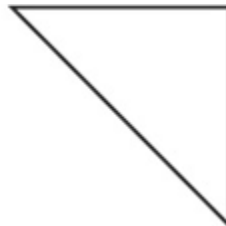
A. $12.09 = 12\frac{9}{10}$

B. $12.09 = 12\frac{9}{100}$

C. $12.90 = 12\frac{1}{90}$

D. $12.90 = 12\frac{90}{10}$

29. These polygons belong in the same group.



Which statement best describes the polygons in this group?

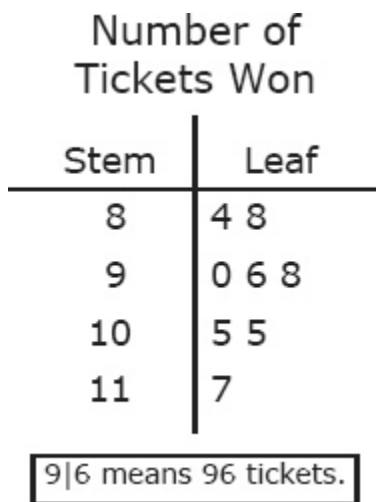
- A. Each polygon has at least one pair of parallel sides.
- B. Each polygon has at least one obtuse angle.
- C. Each polygon has at least one right angle.
- D. Each polygon has at least one acute angle.

30. 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.

31. The stem and leaf plot shows the numbers of tickets Stephen won when he played games at a carnival.

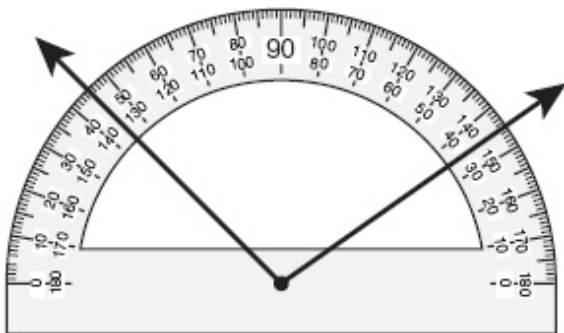


What is the total number of tickets that Stephen won at the carnival?

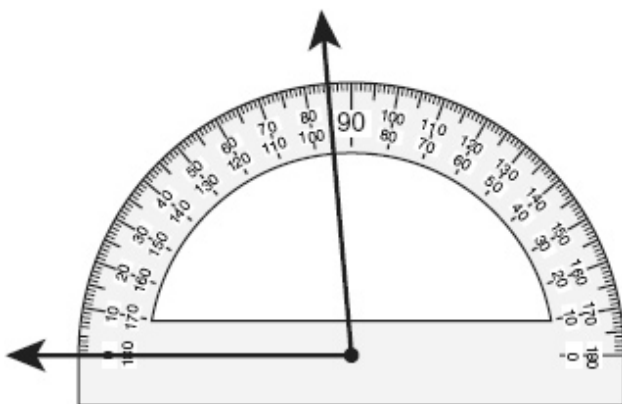
- A. 783
- B. 178
- C. 81
- D. 678

32. Which angle has a measure closest to 95° ?

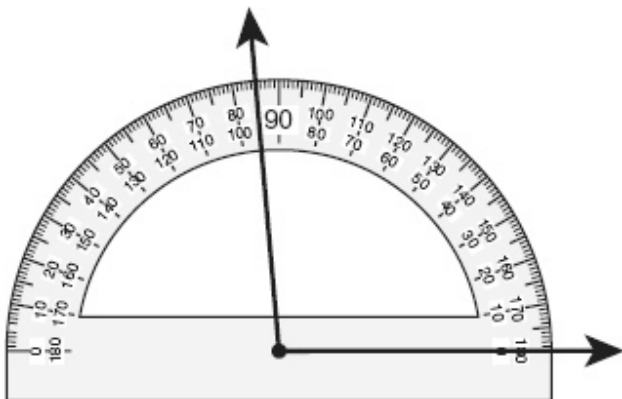
A.



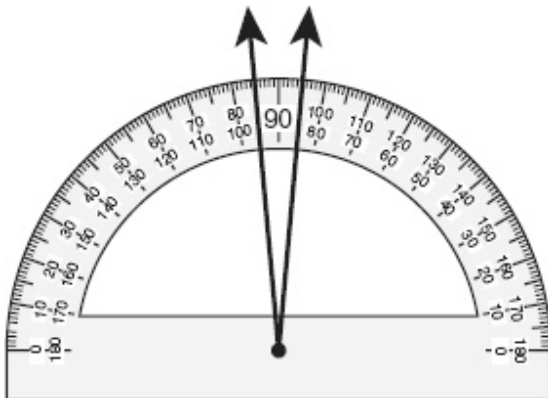
B.



C.



D.



33. 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?

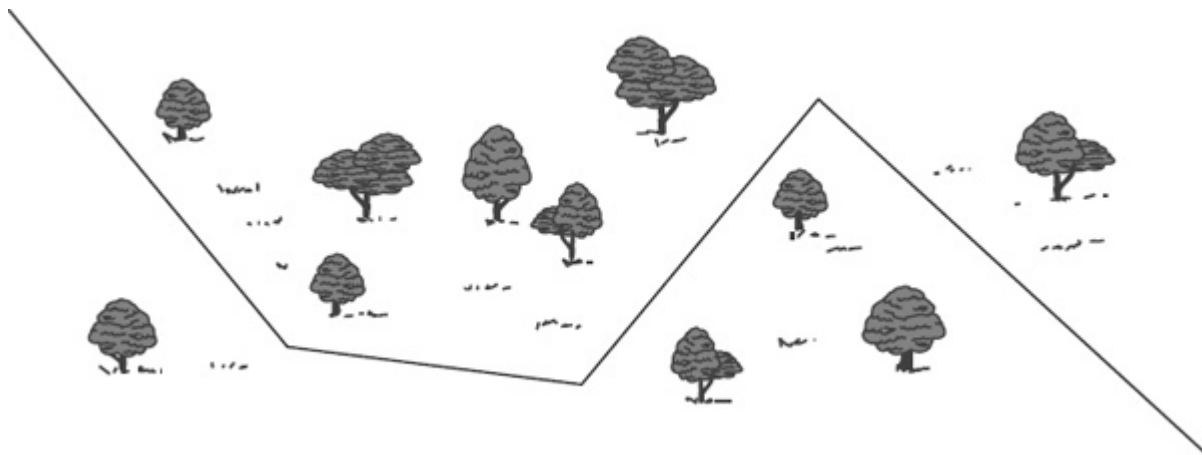
A. $\times 33$

B. $- 32$

C. $\div 33$

D. $+ 32$

34. 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

