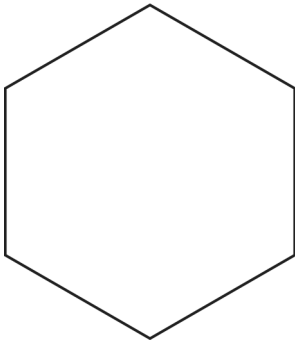


Name: _____

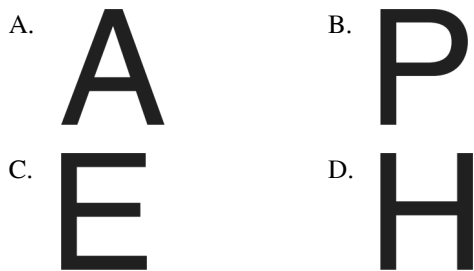
Date: _____

1. How many lines of symmetry does the figure below have?

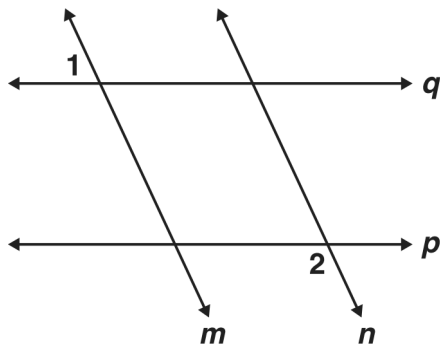


- A. 12 B. 6 C. 3 D. 1

2. Choose the letter that has *more* than one line of symmetry.



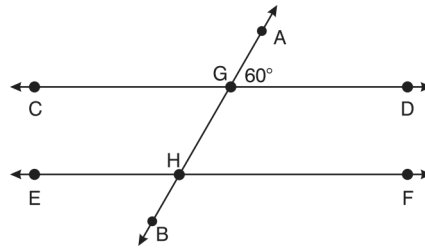
3. Given: $p \parallel q$;
 $m \parallel n$;
 $m\angle 1 = 75^\circ$



What is $m\angle 2$?

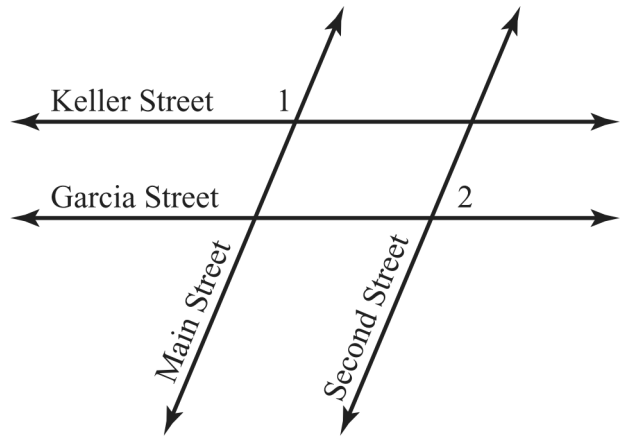
- A. 15° B. 75° C. 90° D. 105°

- 4.



In the figure above, lines CD and EF are parallel. What is the measure, in degrees, of $\angle BHF$?

5. The lines in the diagram below represent four streets in Linda's hometown.

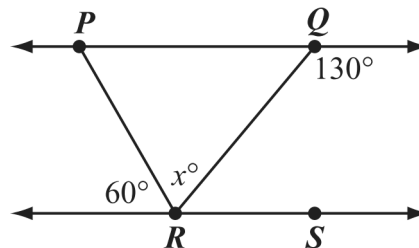


Keller Street is parallel to Garcia Street, and Main Street is parallel to Second Street.

If the $m\angle 1 = 95^\circ$, what is the $m\angle 2$?

- A. 75° B. 85° C. 95° D. 105°

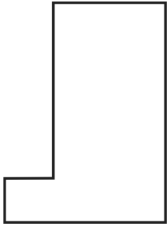
6. In the diagram below, \vec{PQ} and \vec{RS} are parallel.




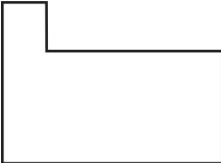
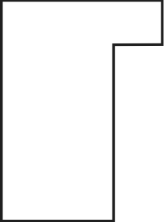
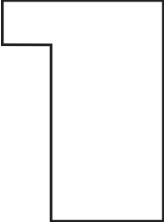
Based on the angle measures in the diagram, what is the value of x ?

- A. 70 B. 60 C. 50 D. 40

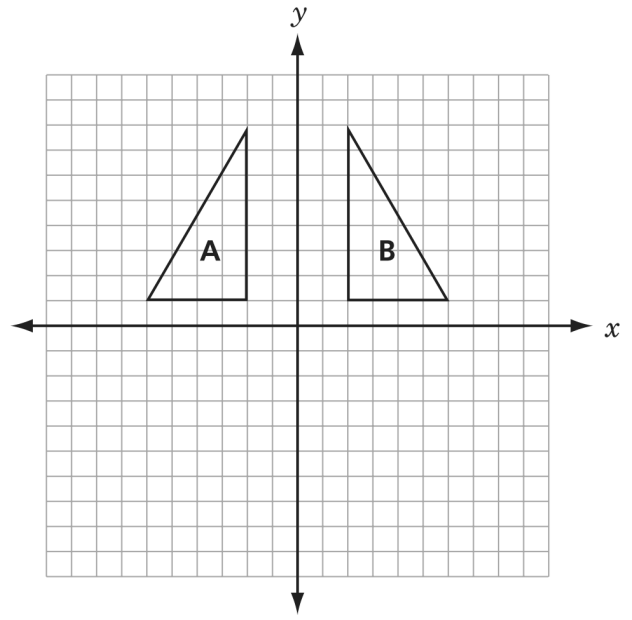
7. A shape is shown below.



Which shows this shape transformed by a flip?

- A.  B. 
- C.  D. 

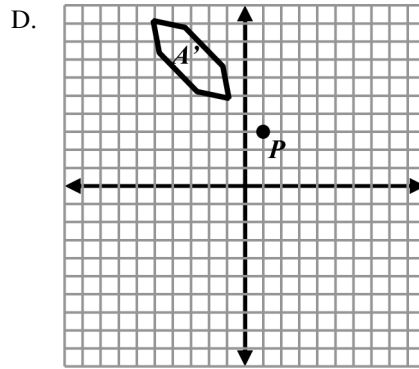
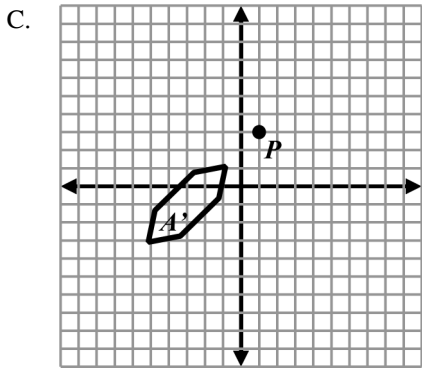
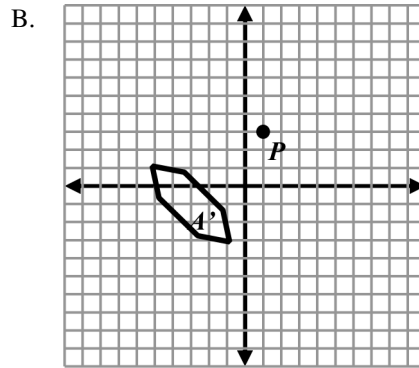
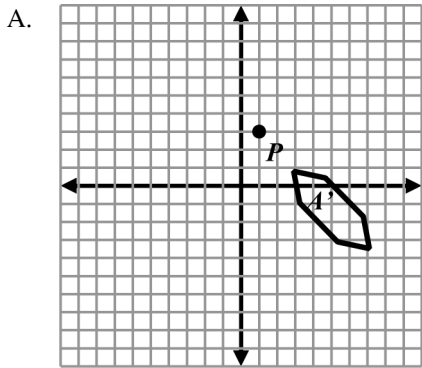
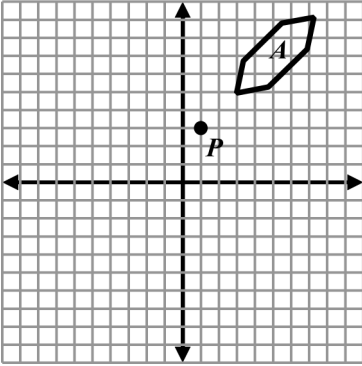
8. Alyssa made the design shown below.



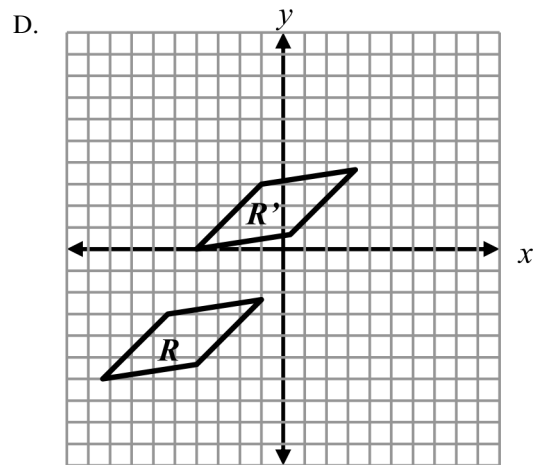
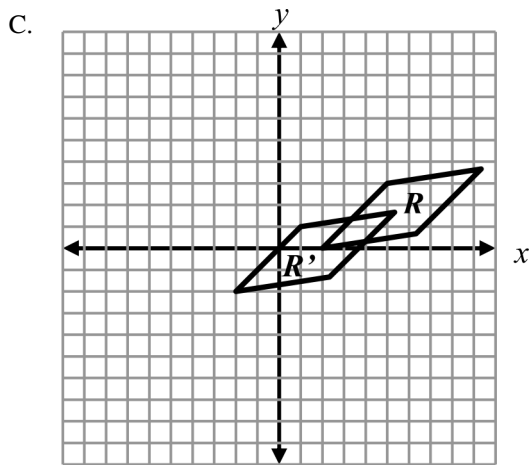
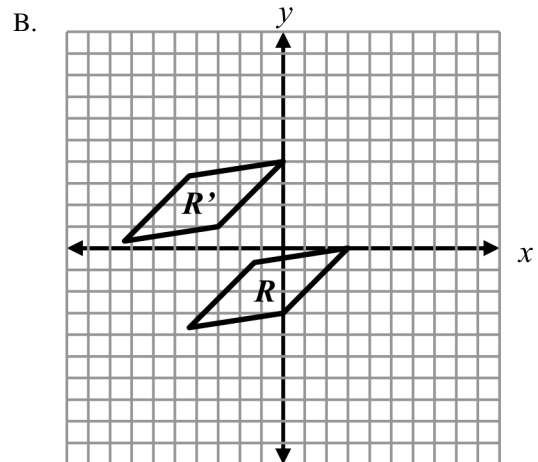
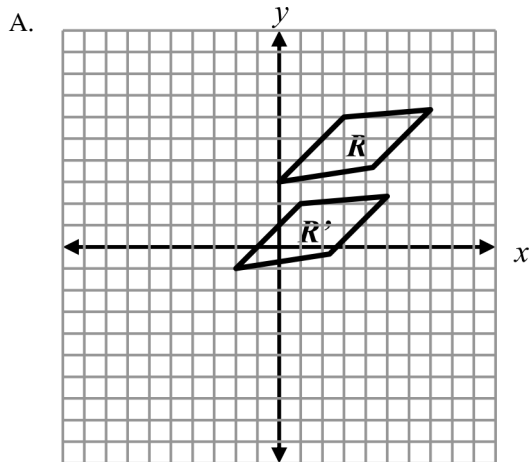
Which transformation could be used to show that figure A is congruent to figure B?

- A. add 5 to each x -coordinate
B. multiply each y -coordinate by -1
C. multiply each x -coordinate by -1
D. rotate the figure 90 degrees about the origin

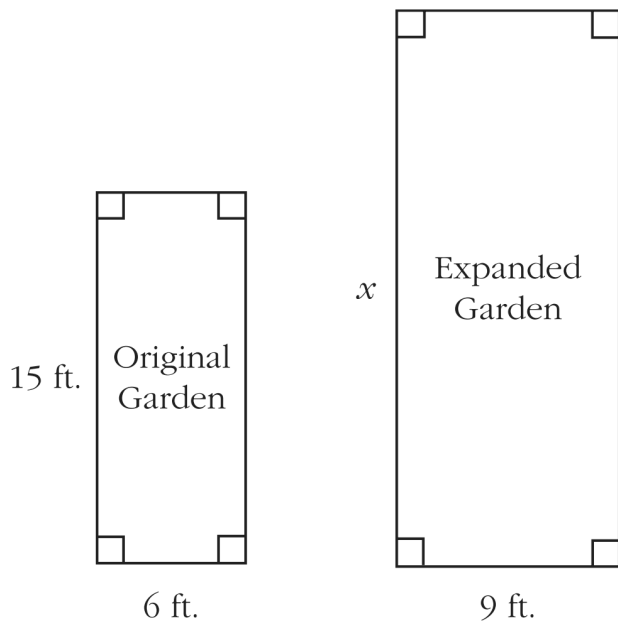
9. Polygon A will be rotated counter-clockwise 90° about point P to form polygon A' .



10. A figure on the graph is translated down 4 units and left 2 units. Which of the following represents this single transformation?

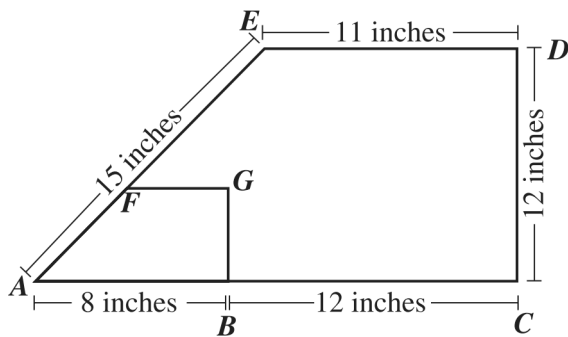


11. The diagram below shows the shape of Robin's original garden and the shape of the garden after it was expanded. The two shapes are similar.



What is the length of the expanded garden (x)?

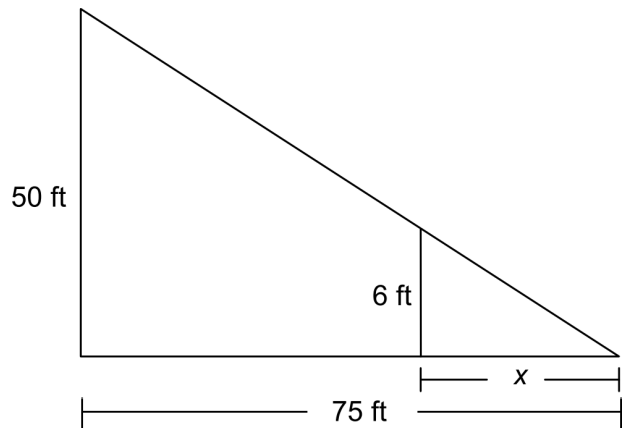
- A. 3.6 ft. B. 10 ft. C. 18 ft. D. 22.5 ft.
12. In the figure below, quadrilateral $ACDE$ is similar to quadrilateral $ABGF$.



What is the length of \overline{AF} ?

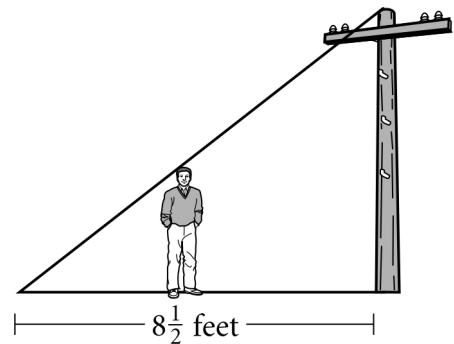
- A. 6.0 inches B. 6.4 inches
 C. 10.0 inches D. 10.7 inches
13. The ratio of the side lengths of two regular pentagons is 3:5. The perimeter of the smaller pentagon is 45 centimeters. What is the perimeter, in centimeters, of the larger pentagon?

14. Look at the figure.



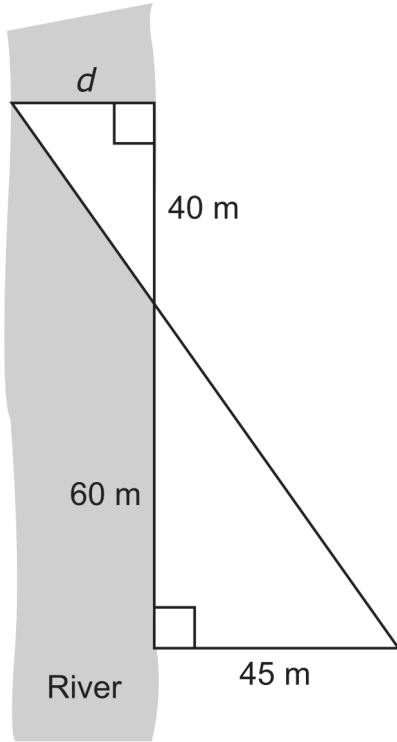
Based on the figure, which equation is *not* true?

- A. $\frac{50}{75} = \frac{6}{x}$ B. $\frac{50}{6} = \frac{75}{x}$
 C. $300 = 75x$ D. $450 = 50x$
15. Lloyd is standing near a telephone pole as shown in the figure below. When his head touches the support wire, he is $2\frac{1}{2}$ feet from where the wire meets the ground. If Lloyd is 5 feet tall, how tall is the telephone pole?



- A. 15 feet B. 17 feet C. 20 feet D. 80 feet

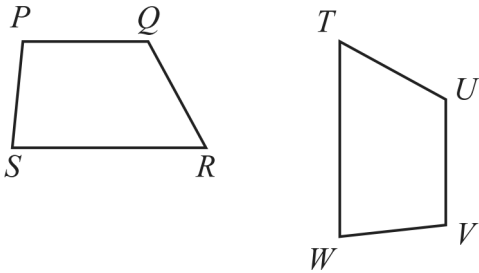
16.



A surveyor takes the measurements shown to find the distance, d , across a river. What is the distance across the river?

- A. 20 meters
- B. 25 meters
- C. 30 meters
- D. 55 meters

17. In the figure below, quadrilateral $PQRS$ is congruent to quadrilateral $VUTW$.



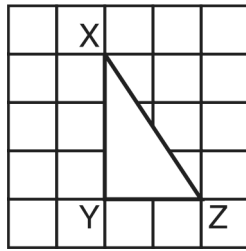
Which of the following pairs of angles must be congruent?

- A. $\angle P$ and $\angle T$
- B. $\angle Q$ and $\angle U$
- C. $\angle R$ and $\angle V$
- D. $\angle S$ and $\angle T$

18. Which of these statements about geometric figures is always true?

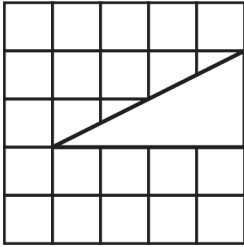
- A. All right triangles are similar.
- B. If two triangles are similar, then they have equal areas.
- C. If two triangles are congruent, then they have equal areas.
- D. All triangles with equal areas are congruent.

19.

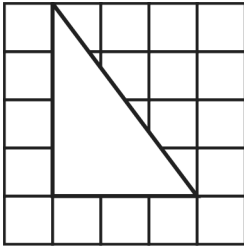


Which triangle is congruent to triangle XYZ?

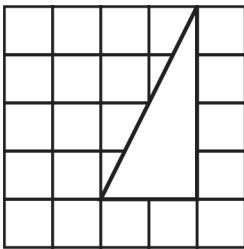
A.



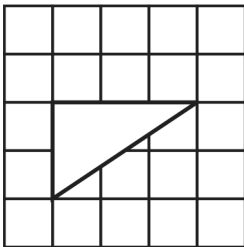
B.



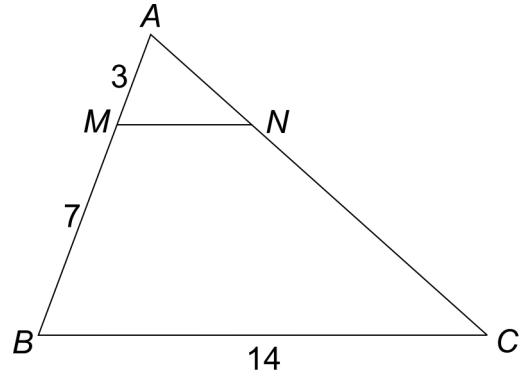
C.



D.



20. Use the triangle below to answer the following question(s).



In $\triangle ABC$ above, \overline{MN} is parallel to \overline{BC} . What is the length of \overline{MN} ?

- A. 4.2 B. 6.0 C. 8.4 D. 7.0

1.
Answer: B
2.
Answer: D
3.
Answer: D
4.
Answer: 120°
5.
Answer: B
6.
Answer: A
7.
Answer: D
8.
Answer: C
9.
Answer: D
10.
Answer: A
11.
Answer: D
12.
Answer: A
13.
Answer:
14.
Answer: C
15.
Answer: B
16.
Answer: C
17.
Answer: B
18.
Answer: C
19.
Answer: D
20.
Answer: A