

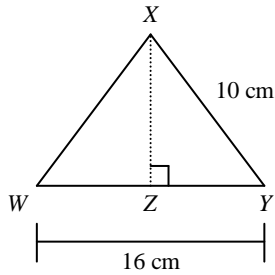
CA Grade 7 Standard 7.MG.3.3

MULTIPLE CHOICE

1. Angie knows the length of two legs of a right triangle are 5 cm and 12 cm. What is the length of the hypotenuse of the triangle?

A. 5 cm
B. 12 cm
C. 13 cm
D. 17 cm

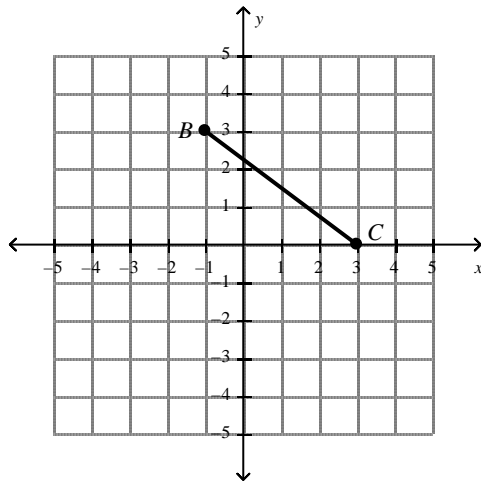
2. In the figure below, \overline{XZ} is the perpendicular bisector of \overline{WY} .



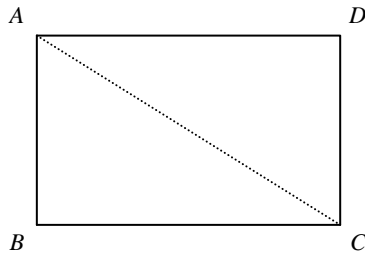
What is the length of \overline{XZ} ?

- A. 3 cm
B. 6 cm
C. 8 cm
D. 10 cm
3. Which of the following lengths do *not* form a right triangle?
- A. 8 ft, 15 ft, 17 ft
B. 5 in., 12 in., 13 in.
C. 7 cm, 15 cm, 17 cm
D. 3 cm, 4 cm, 5 cm

4. Find the length of \overline{BC} on the graph below using the Pythagorean theorem.



- A. 3 units
 B. 4 units
 C. 5 units
 D. 6 units
5. In the figure below, $ABCD$ is a rectangle with diagonal \overline{AC} . The length of \overline{AB} is 4 in. and the length of \overline{BC} is $4\sqrt{3}$ in. What is the length of \overline{AC} ?



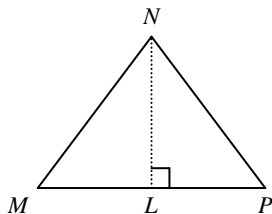
- A. 4 in.
 B. 6 in.
 C. $8\sqrt{3}$ in.
 D. 8 in.
6. Which of the following equations represents the Pythagorean theorem?
- A. $A = bh$
 B. $a^2 + b^2 = c^2$
 C. $A = \frac{1}{2}bh$
 D. $a^2 - b^2 = c^2$
7. Sari is trying to draw a right triangle. The length of one of the sides of the triangle is 14 cm, and the length of the hypotenuse is 34 cm. How long should Sari draw the third side of the triangle? Round your answer to the nearest whole number.
- A. 15 cm
 B. 20 cm
 C. 31 cm
 D. 37 cm

8. Which of the following sides lengths would form a right triangle?

- A. 1 cm, 2 cm, 3 cm
- B. 4 cm, 5 cm, 6 cm

- C. 5 cm, 8 cm, 11 cm
- D. 6 cm, 8 cm, 10 cm

9. In the figure below, MNP is an equilateral triangle with all sides equal to 6 ft. L is the midpoint of \overline{MP} and \overline{NL} is perpendicular to \overline{MP} .

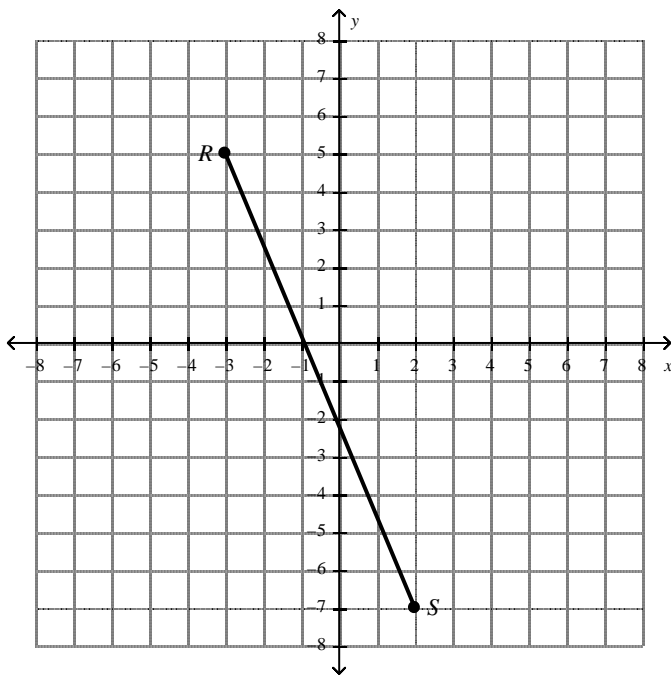


What is the length of \overline{NL} ?

- A. 3 ft
- B. $3\sqrt{3}$ ft

- C. $6\sqrt{3}$ ft
- D. 6 ft

10. On the graph below, find the length of \overline{RS} using the Pythagorean theorem.



- A. 7 units
- B. 10 units

- C. 12 units
- D. 13 units