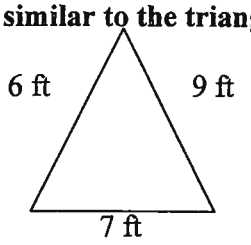
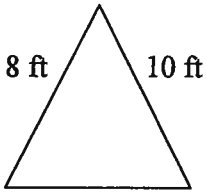
Similar Figures

Name:_____

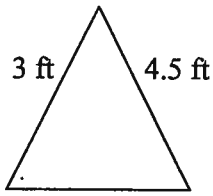
1. Which triangle is similar to the triangle below?



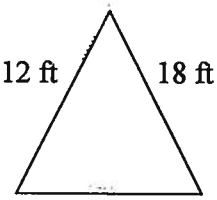
A.



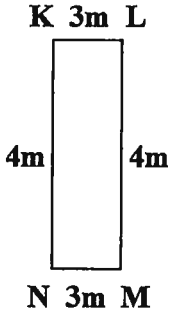
B.

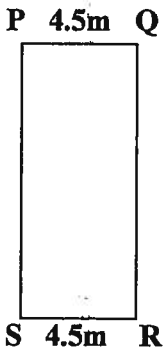


C.



2. Polygon KLMN is similar to polygon PQRS. What is the length of QR?

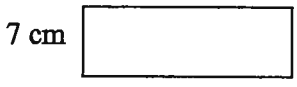




A. 16 m **B.** 9 cm **C.** 8 cm **D.** 6 cm

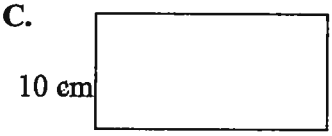
3. Which figure is similar to the rectangle below with length of 9 cm and width of 5 cm?

A.

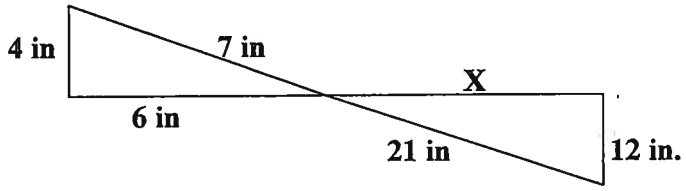


B.

C.



4. What value for X would make the triangles similar?

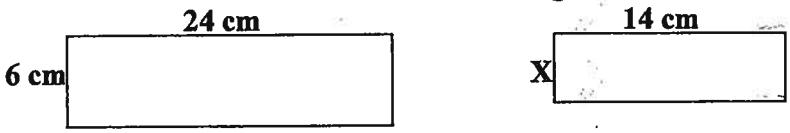


A. 8 in. **B.** 10 in. **C.** 14 in. **D.** 18 in.

5. Which of the following statements is true about similar triangles?

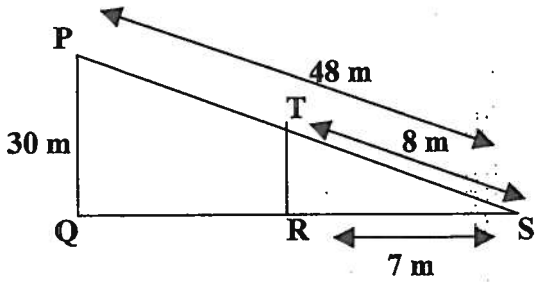
A. The measurements of corresponding angles differ between the two triangles.
B. Two triangles are similar if their corresponding sides are proportional.
C. If two triangles are similar, both their corresponding sides and angles are always congruent.
D. Similar triangles differ in shape but are the same in size.

6. What value for X would make the rectangles similar?



A. 3 cm **B.** 4.5 cm **C.** 5 cm **D.** 3.5 cm

7. The two triangles below are similar. What is the length of TR?

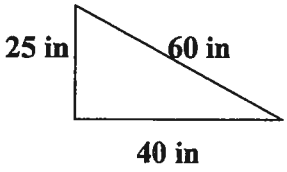


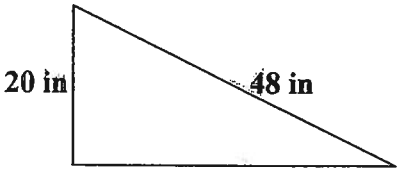
A. 5 m **B.** 6 m **C.** 12 m **D.** 9 m

8. If $\Delta ABC \sim \Delta MNP$, side AC corresponds to side _____.

A. side AB **B.** side MN **C.** side MP **D.** side NP

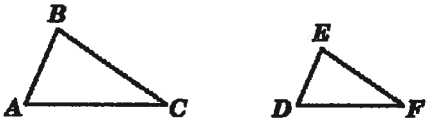
9. **What value of the missing base would make these triangles similar?**





A. 50 in. **B.** 40 in. **C.** 32 in. **D.** 28 in.

10.



If ΔABC is similar to ΔDEF, which of the following must be true?

A $\frac{AB}{AC} = \frac{DE}{EF}$

B $\frac{AB}{DF} = \frac{AC}{EF}$

C $\frac{AB}{BC} = \frac{DE}{DF}$

D $\frac{AB}{DE} = \frac{AC}{DF}$

11. **What is the value of $(12 - 8)^2 + 21 - 4$?**

A. 1 **B.** 3 **C.** 33 **D.** 1,089

12. **Max cuts each yard of rope into 6 pieces. If he has 138 pieces of rope, use the equation $138 = 6x$ to determine the number of yards of rope he started with.**

A. 23 **B.** 132 **C.** 144 **D.** 828

13. **Laurie used 5 yards of fabric to make 2 costumes for the school play. How many yards of fabric would she need to make 14 costumes?**

A. 8 yds **B.** 5.5 yds **C.** 35 yds **D.** 50 yds