You can use proportional relationships to find missing side lengths in similar figures

Solve each proportion.

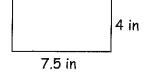
1. $\frac{3}{8} = \frac{x}{24}$

2. $\frac{5}{7} = \frac{25}{y}$

3. $\frac{5}{t} = \frac{t}{45}$

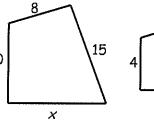
Find the indicated length for each pair of similar figures.

4.



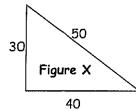


5. 10



4 2

6. Which of the following figures are similar to Figure X? (there may be more than one)



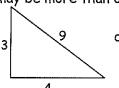
α.



b.



c.



d.



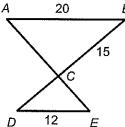
7. In the diagram below, \overline{AB} is parallel to \overline{DE} . AB = 20 inches, DE = 12 inches, and BC = 15 inches. What is the length of \overline{DC} ?

A. 25 in.

C. 7 in.

B. 9 in.

D. 90 in.



8. A rectangle has a length of 4 feet and a perimeter of 14 feet. What is the perimeter of a similar rectangle with a width of 9 feet?

A. 36 ft

- C. 42 ft
- B. 108 ft
- D. 126 ft