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

Solve each proportion.

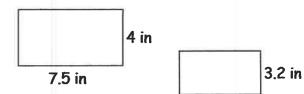
1. $\frac{3}{8} = \frac{x}{24}$

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

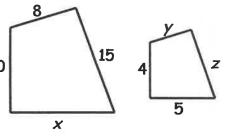
3. $\frac{5}{t} = \frac{t}{45}$

Find the indicated length for each pair of similar figures.

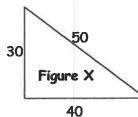
4.



5. 10



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



α.

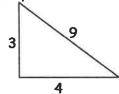


X

b.



c.



d.



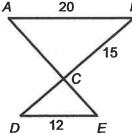
7. In the diagram below, \overline{AB} is parallel to \overline{DE} . AB = 20 inches, DE = 12 inches, and BC = 15 inches. What is the length of \overline{DC} ?

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