Similar Review
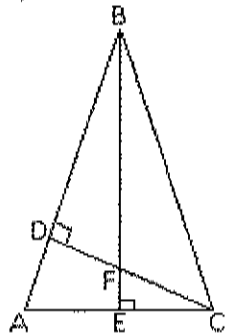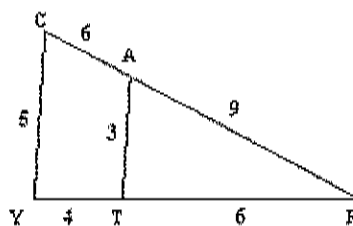# Do Work on Separate Sheet

Determine if the following triangles are similar.
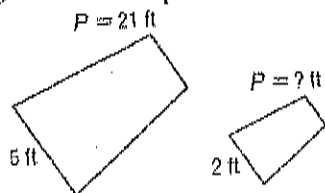
1)

2)

3) The perimeter of △ABC = 12. If a similar triangle has sides length 3, 4, and 11, find the smallest side of △ABC.
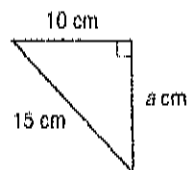
4) Find the perimeter of the smaller figure.

5) In a scale drawing of a playground, the sandbox has a length of 6 in and a perimeter of 19.5 in. The actual length of the sandbox is 48 in. Find the perimeter of the actual sandbox.

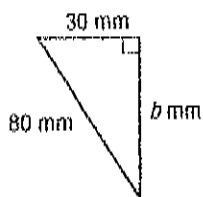## Continue with the work on the back

Find the missing side of each right triangle: Estimate any sides to the nearest integer.

6)

10 cm
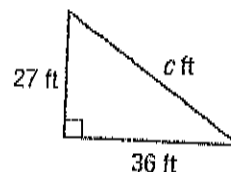
15 cm

a cm

7)

30 mm

80 mm

b mm

8)

27 ft

36 ft

c ft

Determine if a triangle with the following lengths will be a right triangle. Justify your answer.
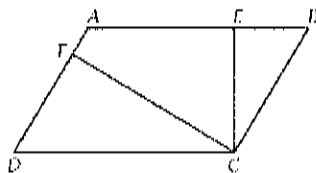
9) 24, 143, 145

10) 135, 140, 175

11) 55, 70, 55

12) A lakefront building that is 30 feet high cast a shadow on the water. How long is that shadow if a 16 foot high truck parked nearby casts an 8 foot shadow?

13) In the diagram below, $\triangle DFC \sim \triangle BEC$. Find the measure of DF if DC = 18, EB = 3, and BC = 4. What is the scale factor?

A   F   B

F

D   C

ANSWERS

1) yes, by AA~   2) yes by SSS~   3) 2   4) 8.4   5) 156   6) 11   7) 74   8) 45

9) yes   10) no   11) no   12) 15   13) 13.5, scale factor $= \frac{9}{2}$