Scale

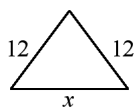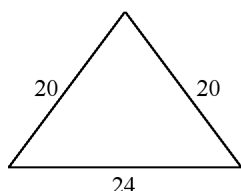**Multiple Choice**
Identify the choice that best completes the statement or answers the question.

The triangles below are similar. Find the value of *x*.
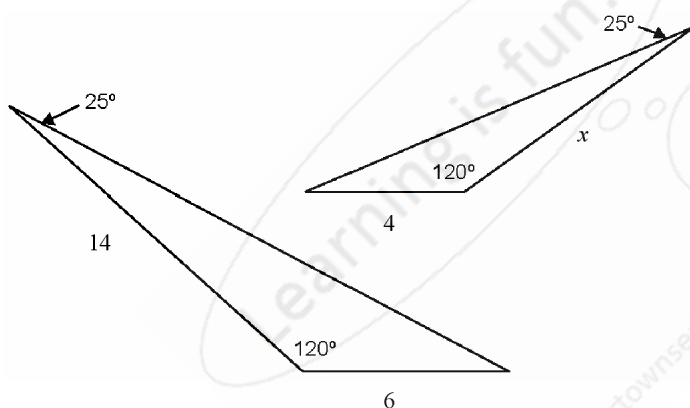
____

20   20
24

12   12
x

14.4   15.2   15   16

____

25°

25°

x

14   120°
4
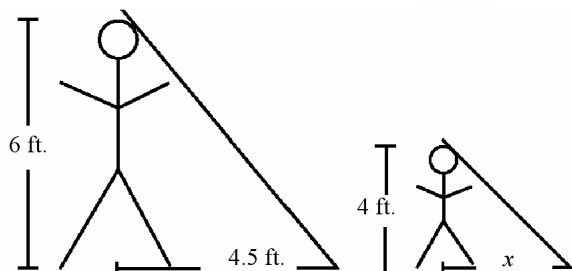
120°
6

$10\frac{1}{2}$ $9\frac{1}{3}$ $10\frac{1}{3}$ 12

____   A 6-ft adult has a shadow 4.5 ft long. How long is the shadow of a 4-ft child standing next to the adult?
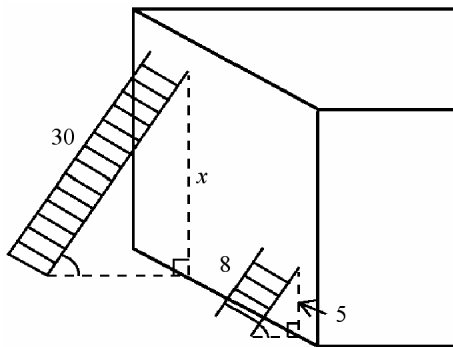
6 ft.

4.5 ft.

4 ft.

x

2.5 ft   3 ft   4.5 ft   3.5 ft

1

____ The ladders shown below are standing against the wall at the same angle. How high up the wall does the longer ladder go? (All measurements are in feet.)

27 ft	8.75 ft	18.75 ft	22.5 ft

A scale drawing uses the scale 3 in. = 20 ft. Find the missing measure.

____ 39 in. = ____ ft

160	720	260	130

____ ____ in. = $13\frac{1}{3}$ ft

0.67	3.67	1.33	2

____ The width of a picture is 12 cm. Using a color copier, you reduce the width of the picture to 4 cm. What is the scale factor of the dilation?

3	4	$\dfrac{1}{3}$	$\dfrac{1}{4}$

____ The scale of a map is 1 in. : 85 mi. How many actual miles does 1 inch represent?

127.5 miles	85 miles	7,225 miles	85 miles

____ In a diagram of a landscape plan, the scale is 1 cm = 10 ft. In the diagram, the trees are 2.7 centimeters apart. How far apart should the actual trees be planted?

27 centimeters	2.7 feet
27 feet	270 feet

____ In a scale drawing of the solar system, the scale is 1 mm = 500 km. For a planet with a diameter of 9000 kilometers, what should be the diameter of the drawing of the planet?

18 millimeters	9000 millimeters
4500000 millimeters	180 millimeters

Scale
Answer Section

MULTIPLE CHOICE

A
B
B
C
C
D
C
B
B
A