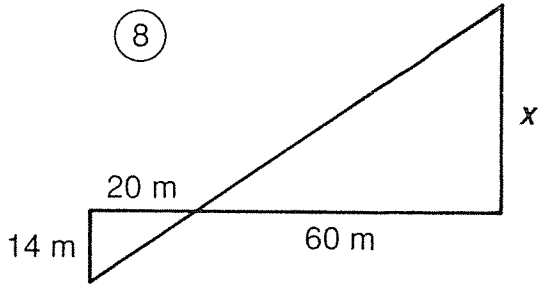
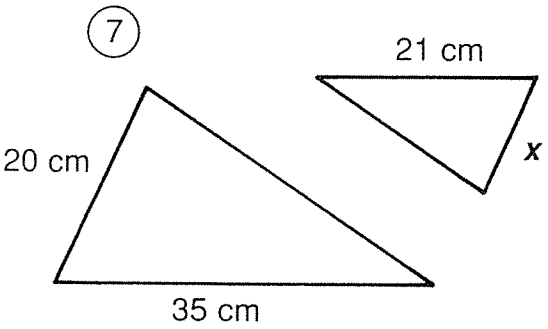
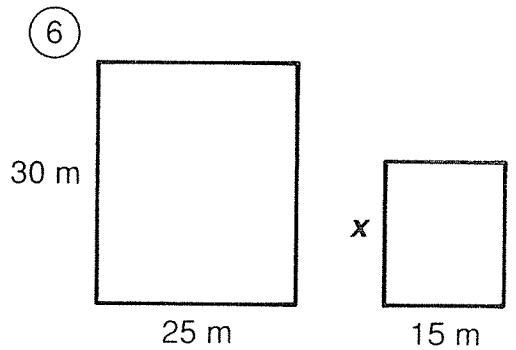
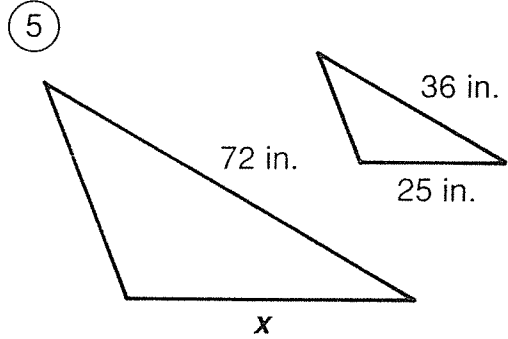
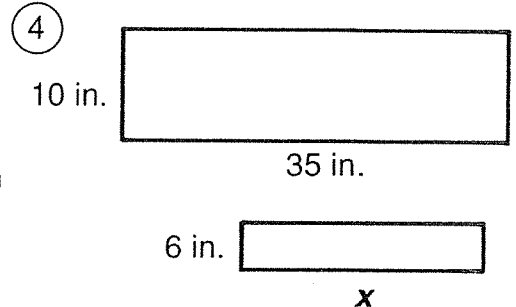
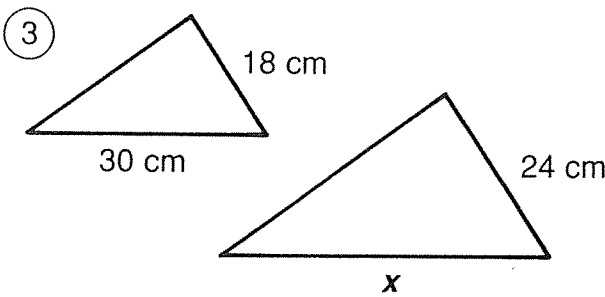
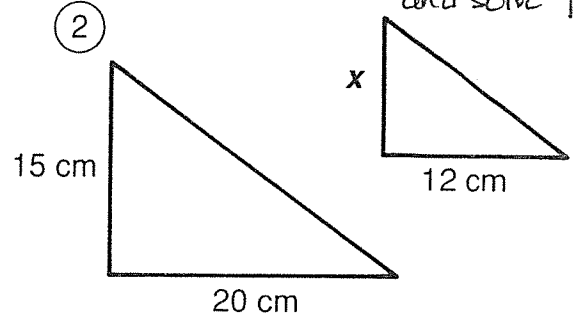
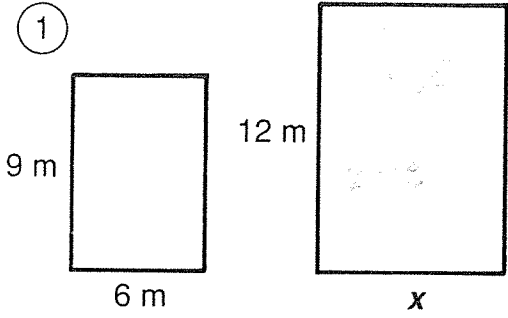


What Is a Termite's Favorite Breakfast?

For each pair of similar figures, find the length x . Cross out the letter next to your answer. When you finish, the answer to the title question will remain.

**You must show your proportion to get credit. Write it next to the problem and solve for x .*

- W
F
O
O
C
A
D
K
M
S
E
G
G
A
T
L
E
- 9 cm
 - 14 cm
 - 15 ft
 - 20 m
 - 50 in.
 - 8 m
 - 24 in.
 - 12 cm
 - 16 ft
 - 46 m
 - 21 in.
 - 44 cm
 - 10 cm
 - 18 m
 - 48 in.
 - 40 cm
 - 42 m



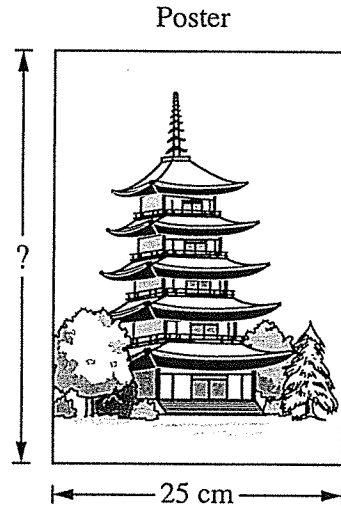
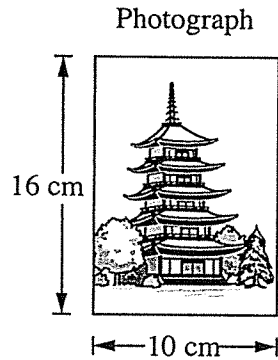
⑨ A flagpole casts a shadow 10 ft long. If a man 6 ft tall casts a shadow 4 ft long at the same time of day, how tall is the flagpole?

⑩ A photograph is 25 cm wide and 20 cm high. It must be reduced to fit a space that is 8 cm high. Find the width of the reduced photograph.

The Poster

This problem gives you the chance to:

- calculate sizes in an enlargement



1. A photograph is enlarged to make a poster.
The photograph is 10 cm wide and 16 cm high.
The poster is 25 cm wide. How high is the poster?
Explain your reasoning.

2. On the poster, the building is 30 cm tall.
How tall is it on the photograph?
Explain your work.

Two Shadow Problems

Name: _____

Class: _____

Date: _____

Draw a picture and set up a proportion to solve each of the problems below.

1. A 36' tree is standing next to a 6' man. At 4 in the afternoon the man casts a shadow that is 15' long. How long is the tree's shadow? Remember that there are eight different ways to set up the proportion and get the right answer so your method may not be the same as someone else's.

Picture

Proportion

— = —

2. A 60' tree is standing next to a flag pole. At two in the afternoon the tree casts a shadow that is 24' long and the flag pole casts a shadow that is 10' long. How tall is the flag pole? Remember that there are eight different ways to set up the proportion and get the right answer so your method may not be the same as someone else's.

Picture

Proportion

— = —