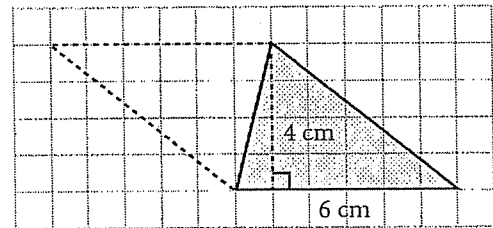
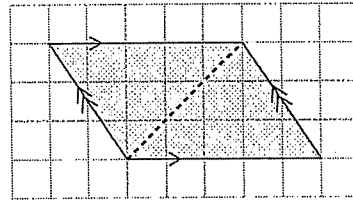




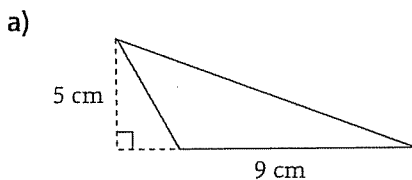
Quick Review

- This parallelogram has been divided into 2 congruent triangles.
So, the area of one triangle is $\frac{1}{2}$ the area of the parallelogram.
- To find the area of a triangle with base 6 cm and height 4 cm, complete a parallelogram on one side of the triangle.
- The area of the parallelogram is:
 $A = \text{base} \times \text{height}$
 $A = 6 \times 4 = 24$
 The area of the parallelogram is 24 cm^2 .
 So, the area of the triangle is: $\frac{1}{2}$ of $24 \text{ cm}^2 = 12 \text{ cm}^2$
- You can use this formula for the area of a triangle.
 $\text{Area} = \frac{1}{2} \text{ base} \times \text{height}$
 $A = \frac{1}{2} bh$
 or $A = bh \div 2$
 or $A = \frac{bh}{2}$



Practice

1. Find the area of each triangle.

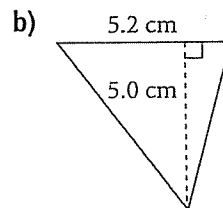


$$A = \frac{bh}{2}$$

$$A = \underline{\hspace{2cm}}$$

$$= \underline{\hspace{2cm}}$$

The area is $\underline{\hspace{2cm}}$ cm^2 .



$$A = \frac{1}{2} bh$$

$$A = \underline{\hspace{2cm}}$$

$$= \underline{\hspace{2cm}}$$

The area is $\underline{\hspace{2cm}}$ cm^2 .

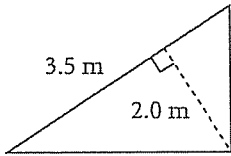
H I N T

Write the formula first.
Then substitute for each variable.

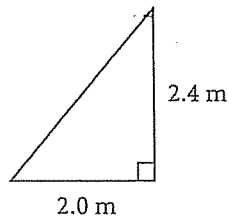


2. Find the area of each triangle.

a)



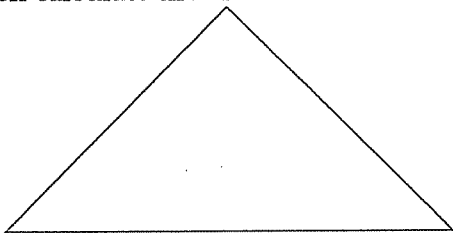
b)



3. Measure and label the base and height of each triangle in centimetres.

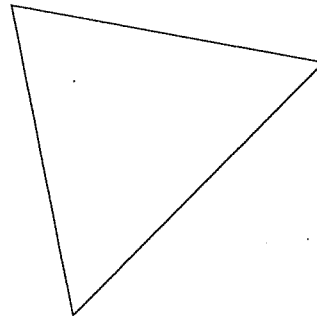
Then calculate the area.

a)



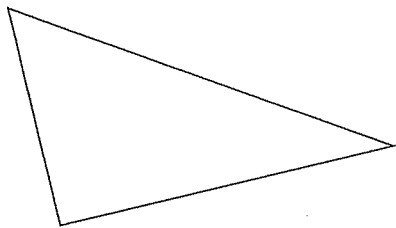
Area = _____

b)



Area = _____

c)



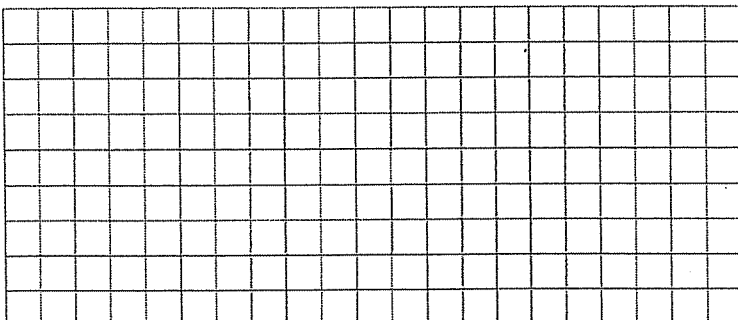
Area = _____

HINT

In a right triangle, the perpendicular sides can be the base and the height.



4. Draw 3 different triangles each with base 5 units and height 4 units.

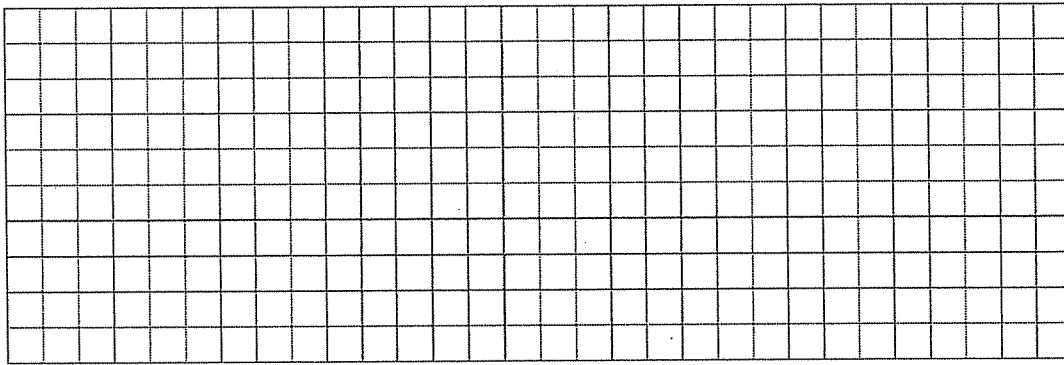


HINT

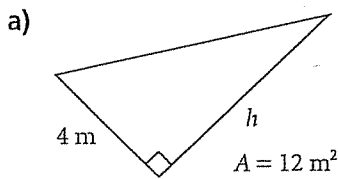
You can draw many different triangles with the same base and height.



5. Draw 3 different triangles each with area 12 square units.



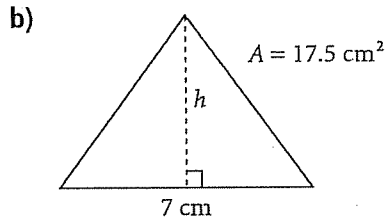
6. The area, A , of each triangle is given.
Find the height, h , of each triangle.



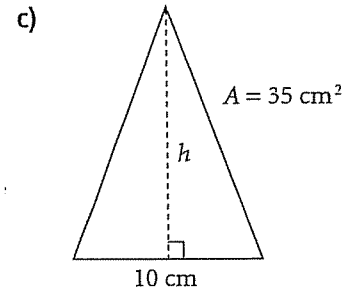
$$\text{Area} = \frac{bh}{2}$$

$$12 = \frac{4 \times h}{2}$$

Height = _____

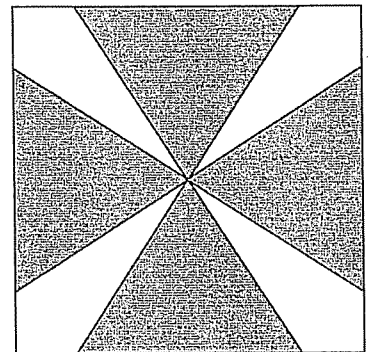


Height = _____



Height = _____

7. Bernice makes this design on a square sheet of paper.
The paper has a side length of 20 cm.
Each triangle has a base of 12 cm and a height of 10 cm.
Find the area of the white part of the design.
Show your work.



H I N T

Subtract the areas of the shaded parts from the area of the square sheet of paper.

