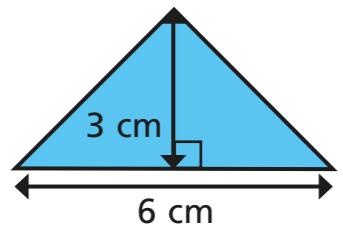


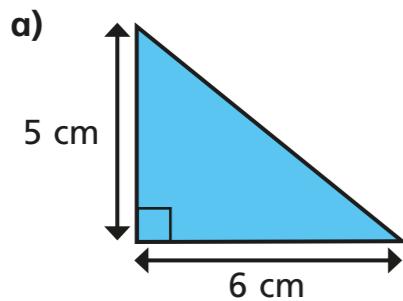
## Area of a triangle (3)

- 1 Calculate the area of the triangle.

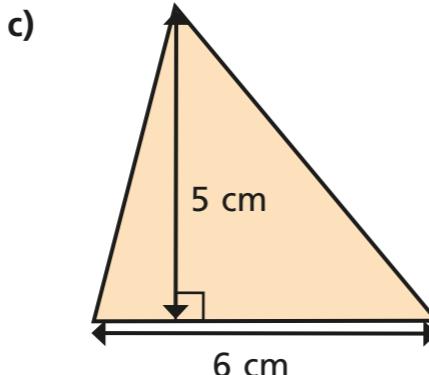


$$\text{area} = \boxed{9} \text{ cm}^2$$

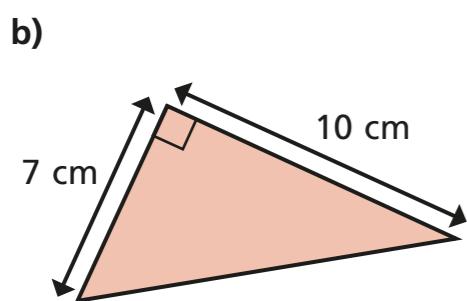
- 2 Calculate the area of the triangles.



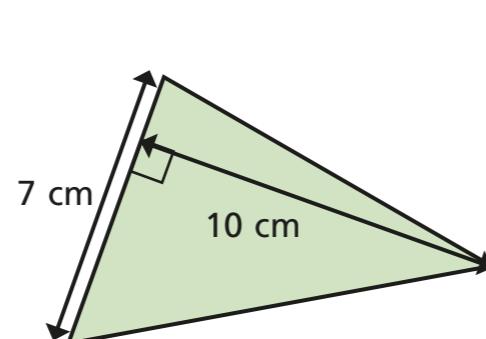
$$\text{area} = \boxed{15} \text{ cm}^2$$



$$\text{area} = \boxed{15} \text{ cm}^2$$

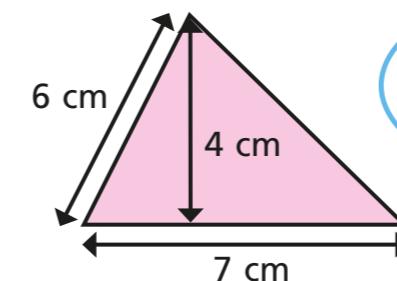


$$\text{area} = \boxed{35} \text{ cm}^2$$

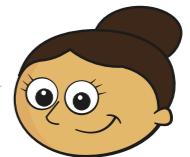


$$\text{area} = \boxed{35} \text{ cm}^2$$

- 3 What mistake has Dora made?

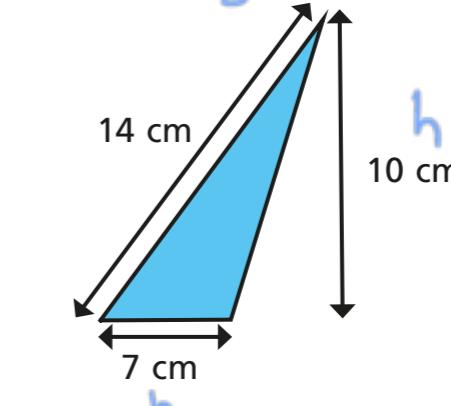
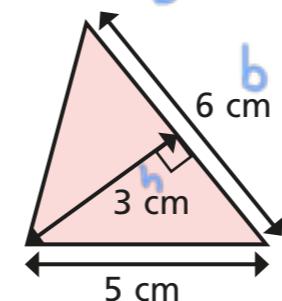
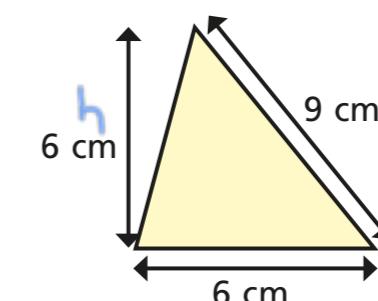
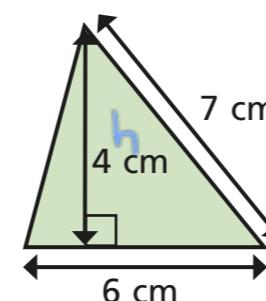


To find the area you do  
 $7 \times 6 \div 2 = 21 \text{ cm}^2$



- 4 Label the base of each triangle  $b$ .

Label the perpendicular height  $h$ .



- 5 Are the statements always, sometimes or never true?

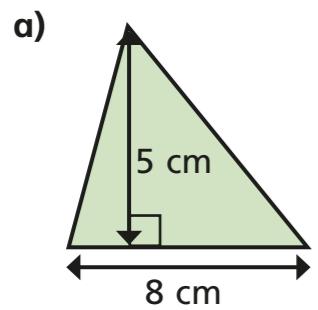
The side at the bottom of a triangle is the base.

Sometimes

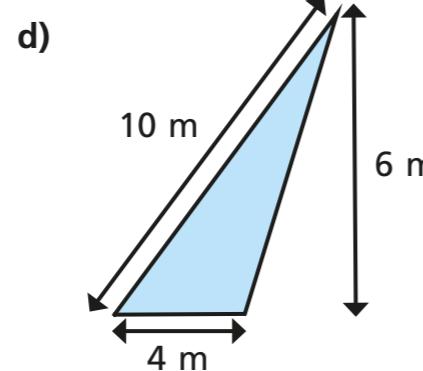
The perpendicular height is equal to the vertical height.

Sometimes

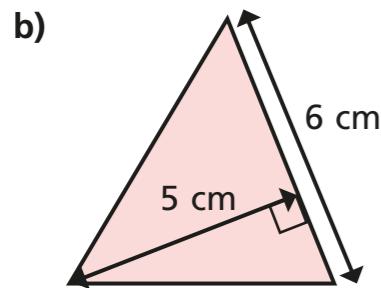
**6** Calculate the area of the triangles.



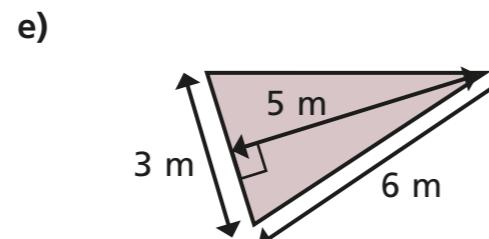
$$\text{area} = \boxed{20} \text{ cm}^2$$



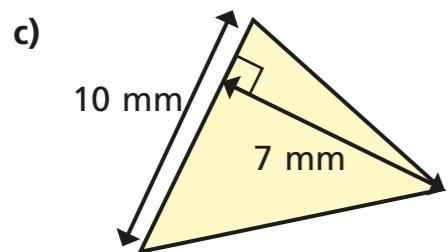
$$\text{area} = \boxed{12} \text{ m}^2$$



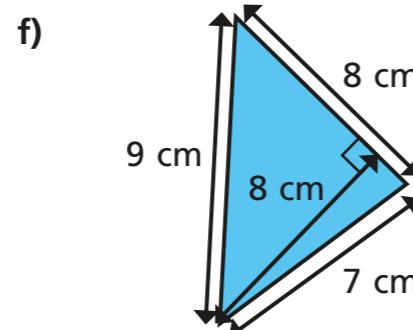
$$\text{area} = \boxed{15} \text{ cm}^2$$



$$\text{area} = \boxed{7.5} \text{ m}^2$$

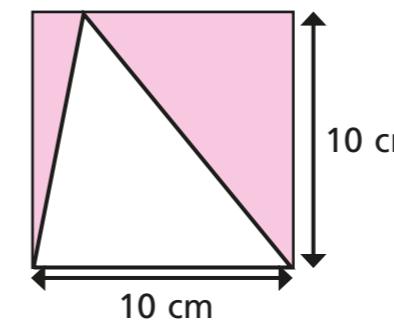


$$\text{area} = \boxed{35} \text{ mm}^2$$



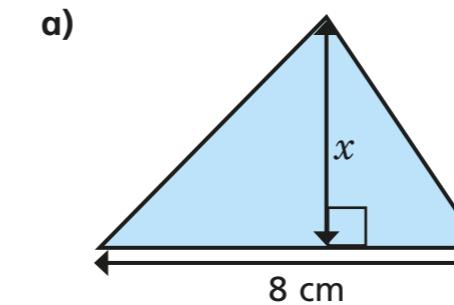
$$\text{area} = \boxed{32} \text{ cm}^2$$

**7** Find the area of the shaded region.

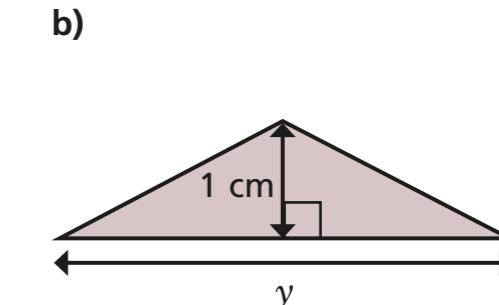


$$\text{area} = \boxed{50} \text{ cm}^2$$

**8** The area of each triangle is  $12 \text{ cm}^2$ . Find the missing lengths.

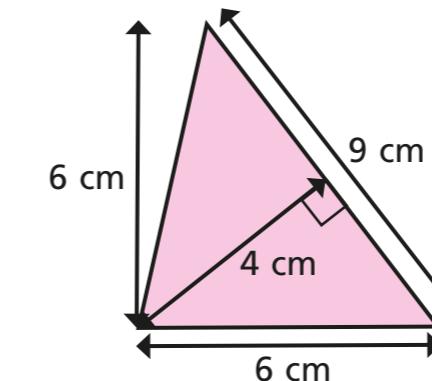


$$x = \boxed{3} \text{ cm}$$



$$y = \boxed{24} \text{ cm}$$

**9** Show two ways you can work out the area of the triangle.



$$\frac{9 \times 4}{2} = 18 \text{ cm}^2$$

$$\frac{6 \times 6}{2} = 18 \text{ cm}^2$$

Compare answers with a partner.

