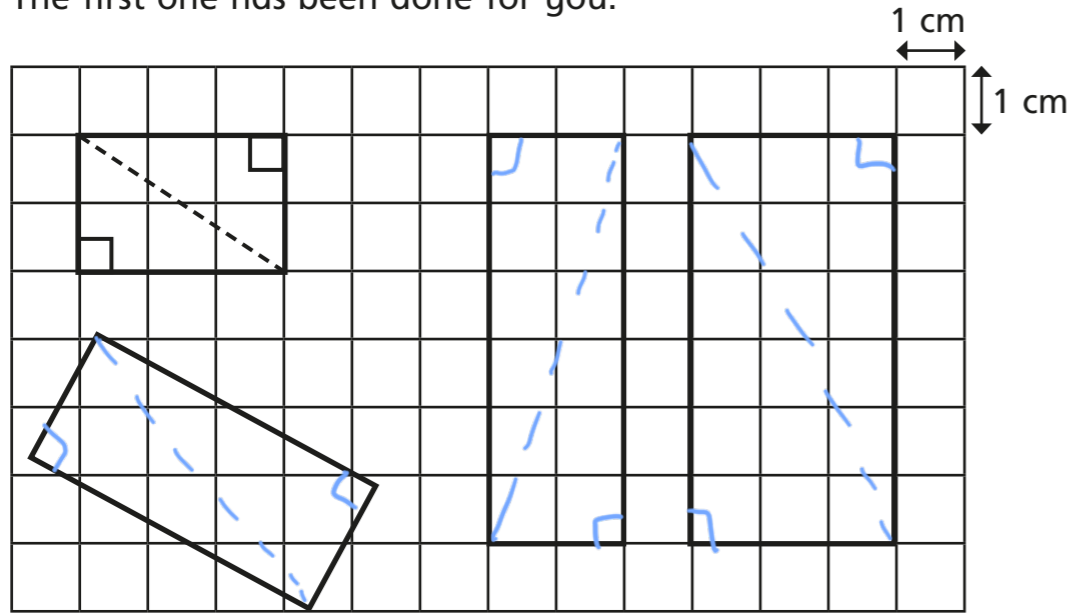
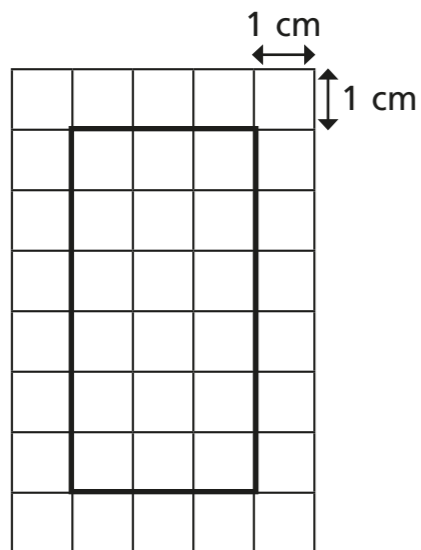


Area of a triangle (2)

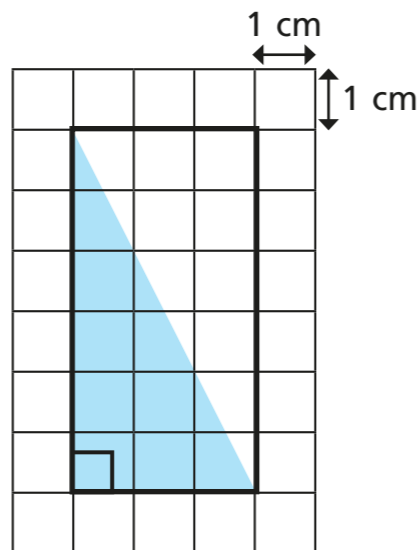
- 1 a) Divide each rectangle into two right-angled triangles. The first one has been done for you.



- 2 a) Calculate the area of the rectangle and the triangle.



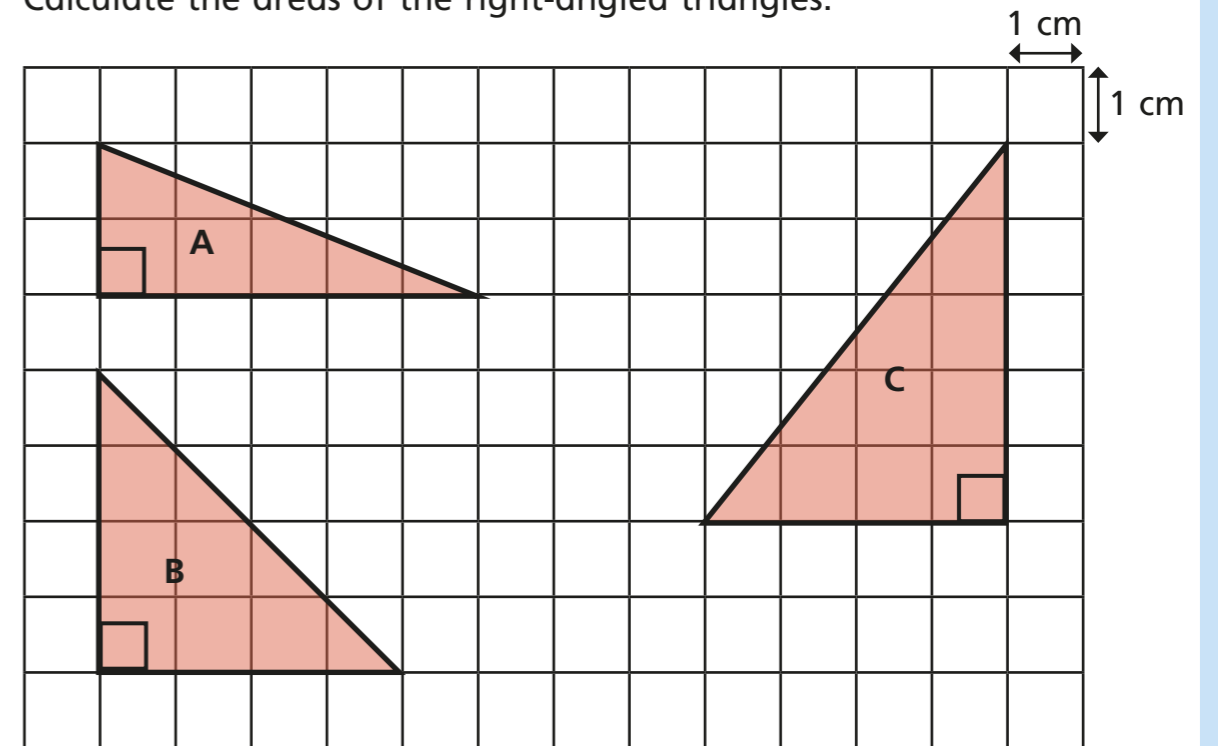
area = cm²



area = cm²

- b) Explain how you worked out the area of the right-angled triangle.

- 3 Calculate the areas of the right-angled triangles.

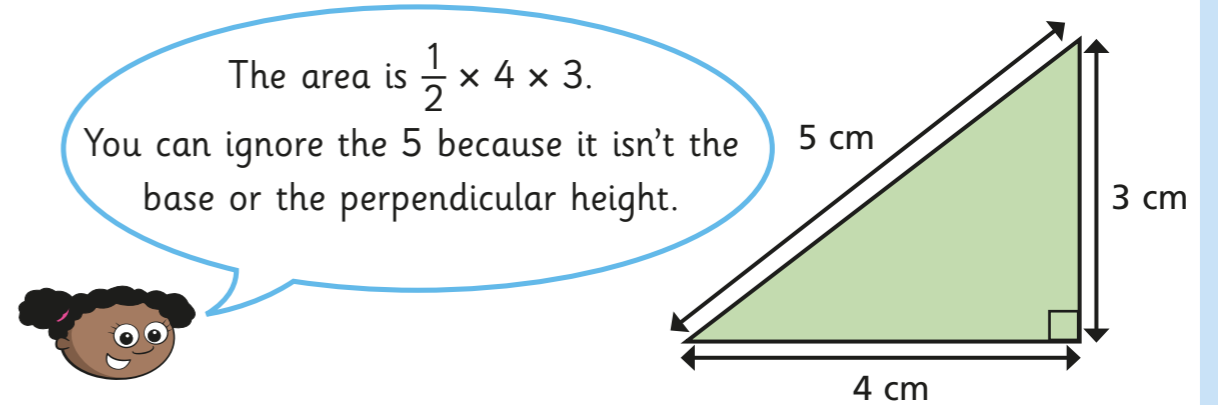


triangle A = cm² triangle C = cm²

triangle B = cm²

- 4 Whitney is calculating the area of the triangle using the formula.

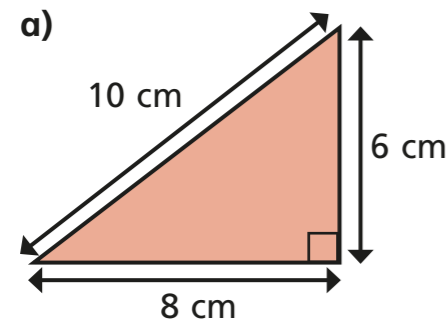
Area = $\frac{1}{2} \times \text{base} \times \text{perpendicular height}$

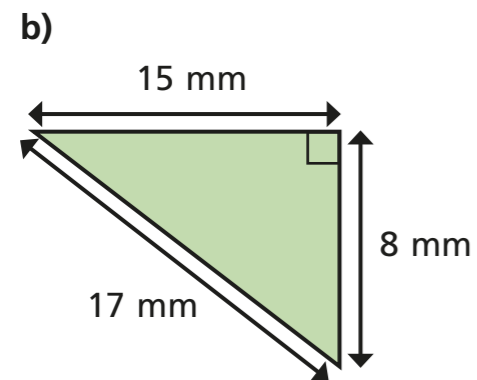


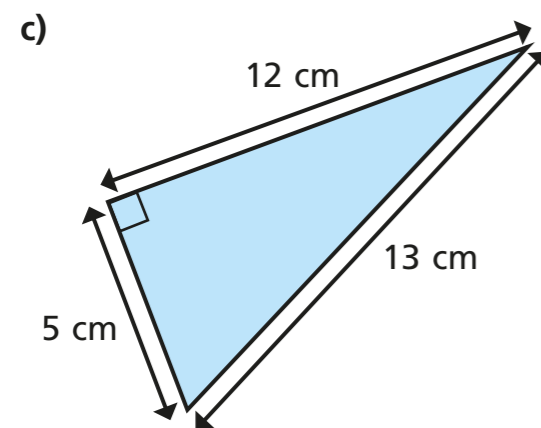
Do you agree with Whitney? yes

Talk about it with a partner.

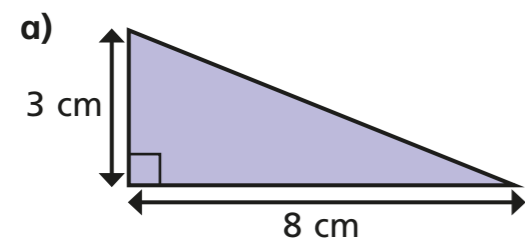
5 Insert the correct numbers into the formula to calculate the area of the triangle.

a)  $\frac{1}{2} \times \boxed{6} \times \boxed{8} = \boxed{24} \text{ cm}^2$

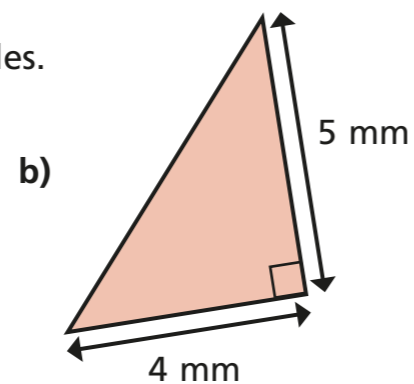
b)  $\frac{1}{2} \times \boxed{8} \times \boxed{15} = \boxed{60} \text{ mm}^2$

c)  $\frac{1}{2} \times \boxed{12} \times \boxed{5} = \boxed{30} \text{ cm}^2$

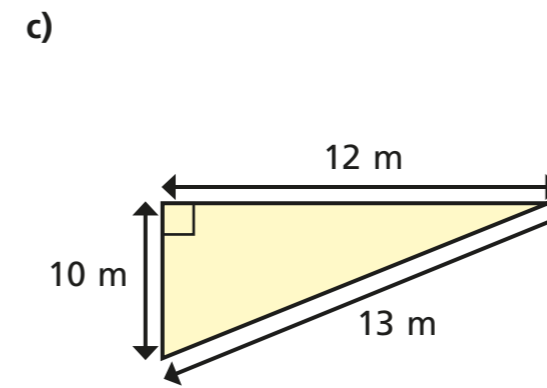
6 Calculate the areas of the triangles.

a) 

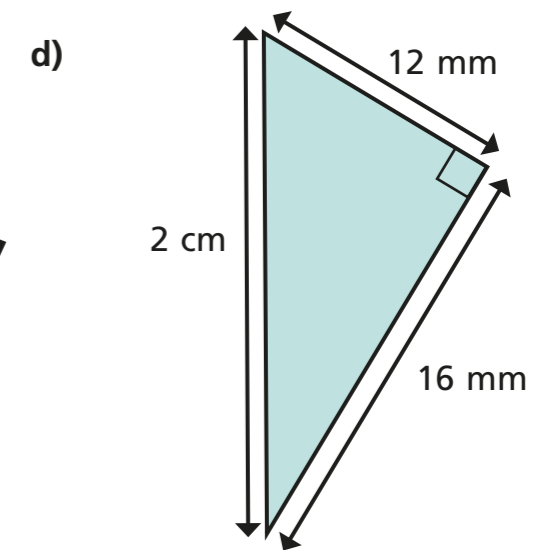
area = $\boxed{12} \text{ cm}^2$

b) 

area = $\boxed{10} \text{ mm}^2$

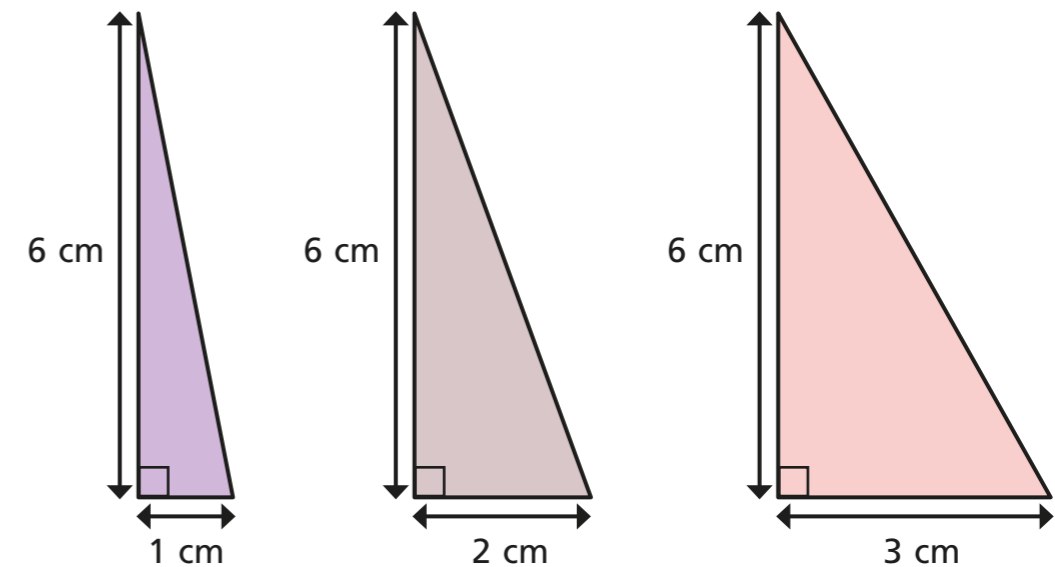
c) 

area = $\boxed{60} \text{ m}^2$

d) 

area = $\boxed{96} \text{ mm}^2$

7 The width of the right-angled triangles is increasing by 1 cm.



Investigate the pattern for the areas.

What happens to the pattern if the length **and** width increase?

