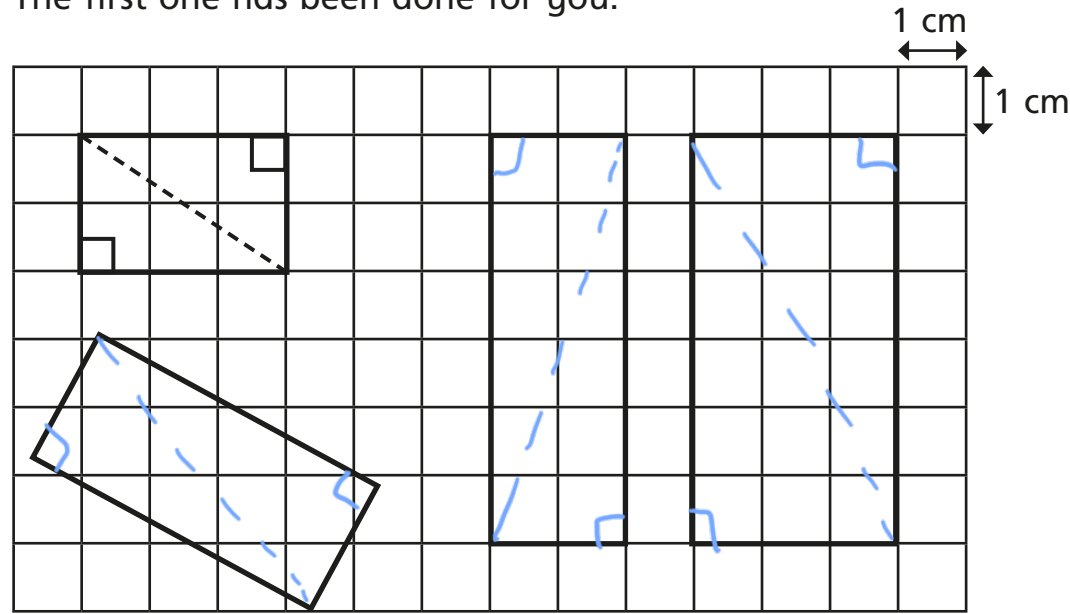
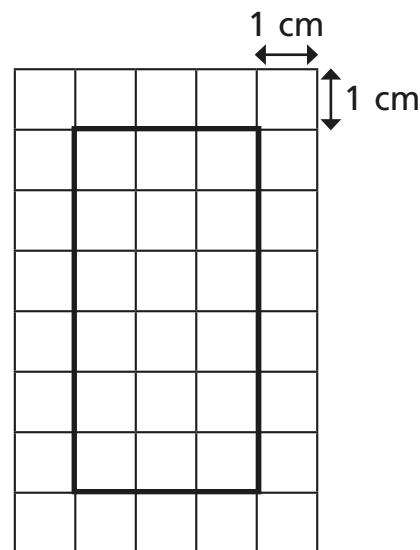


Area of a triangle (2)

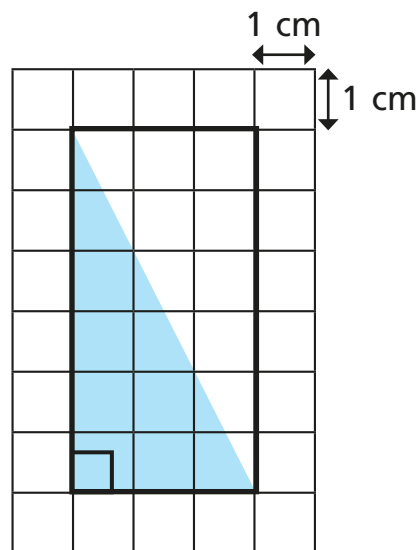
- 1 a) Divide each rectangle into two right-angled triangles. The first one has been done for you.



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



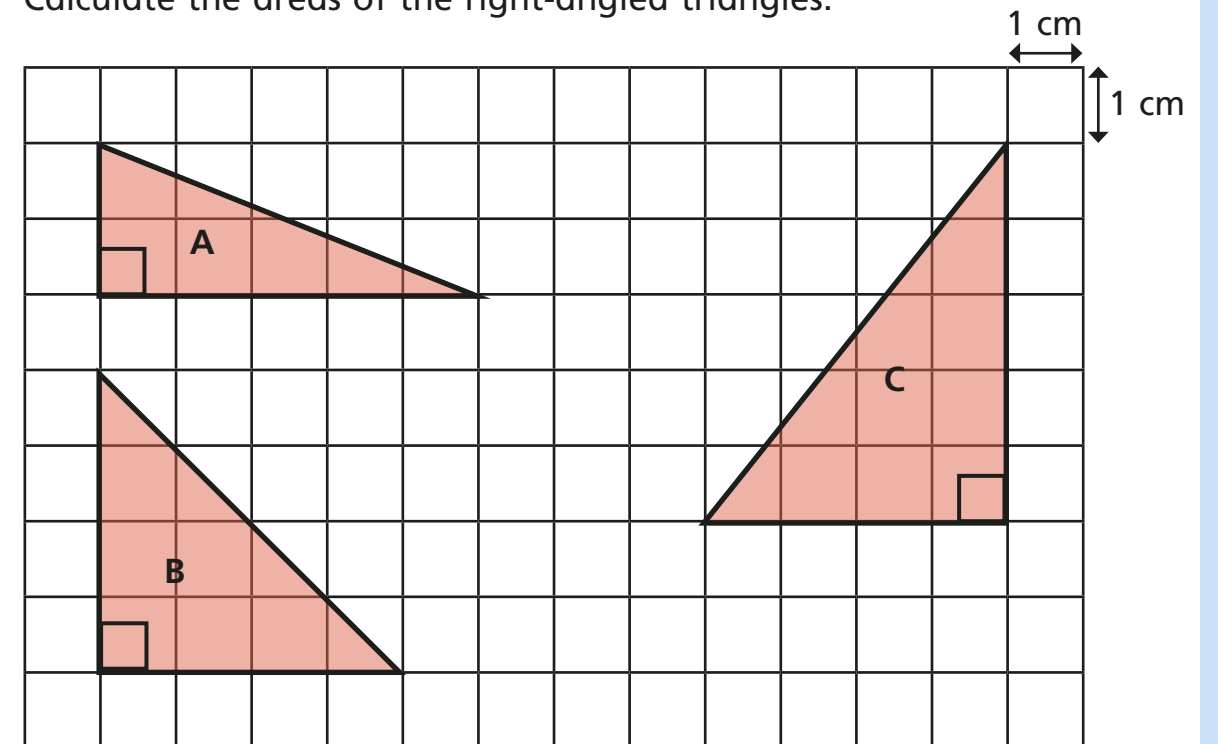
area = 18 cm²



area = 9 cm²

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

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

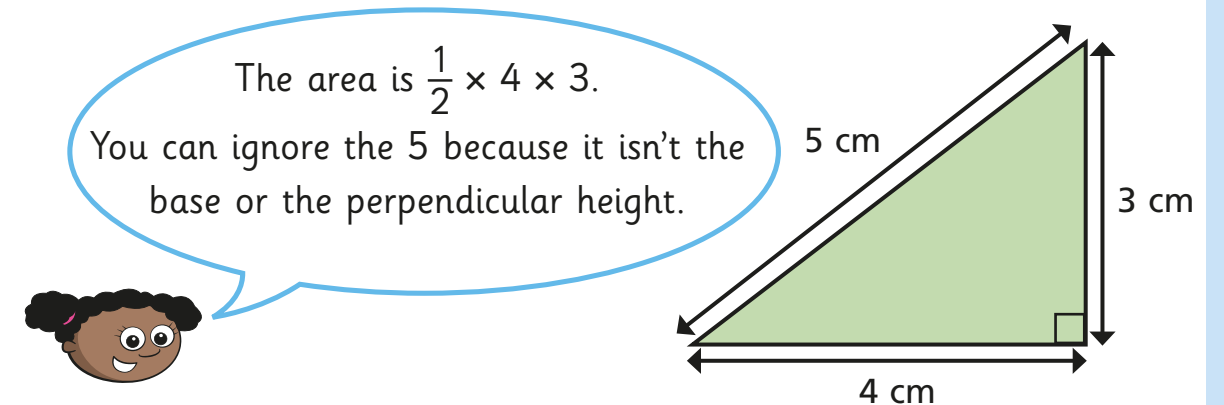


triangle A = 5 cm² triangle C = 10 cm²

triangle B = 8 cm²

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

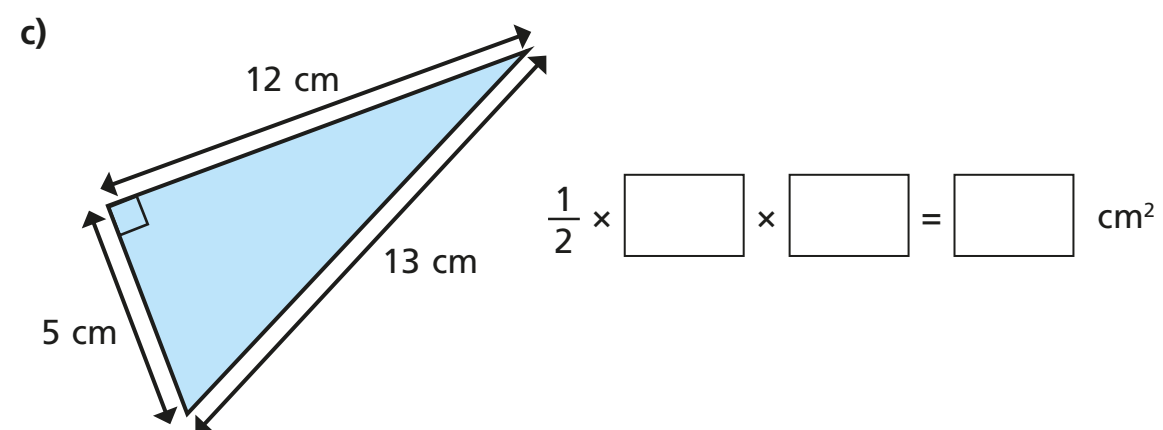
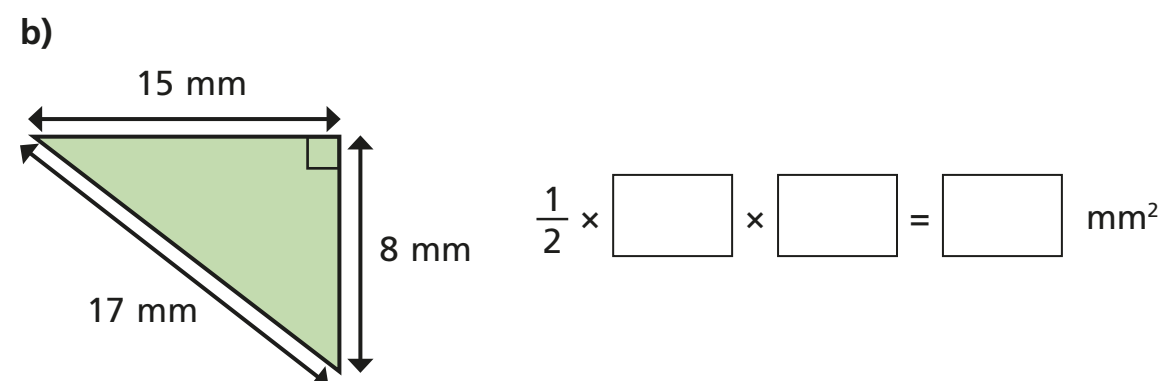
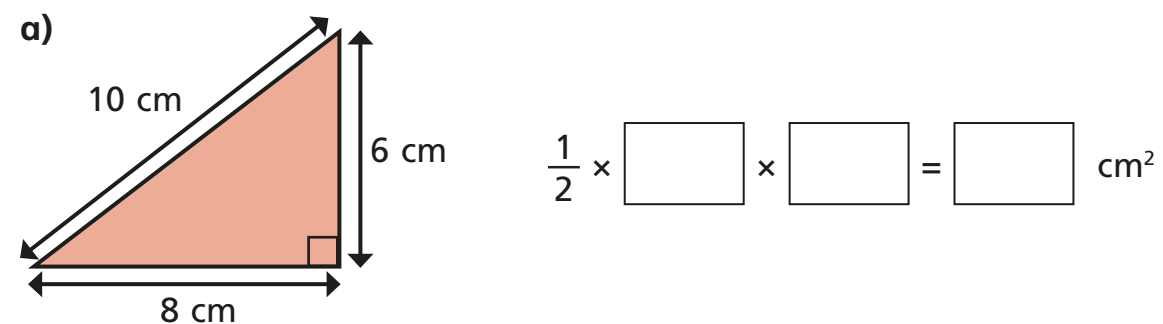
$$\text{Area} = \frac{1}{2} \times \text{base} \times \text{perpendicular height}$$



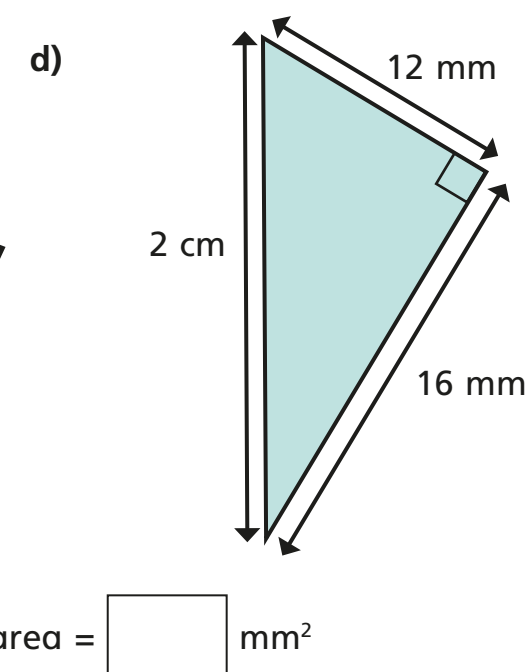
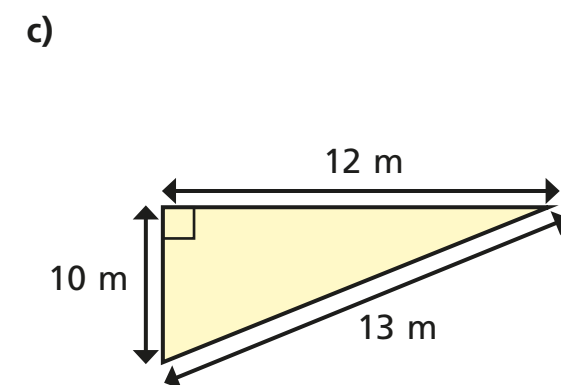
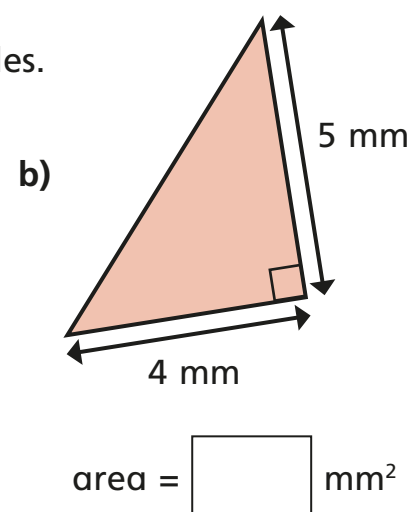
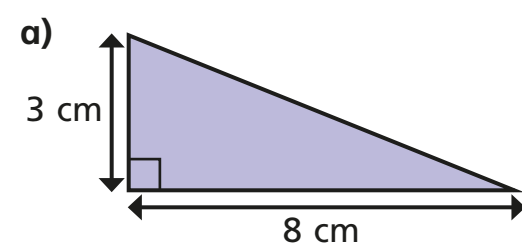
Do you agree with Whitney? yes

Talk about it with a partner.

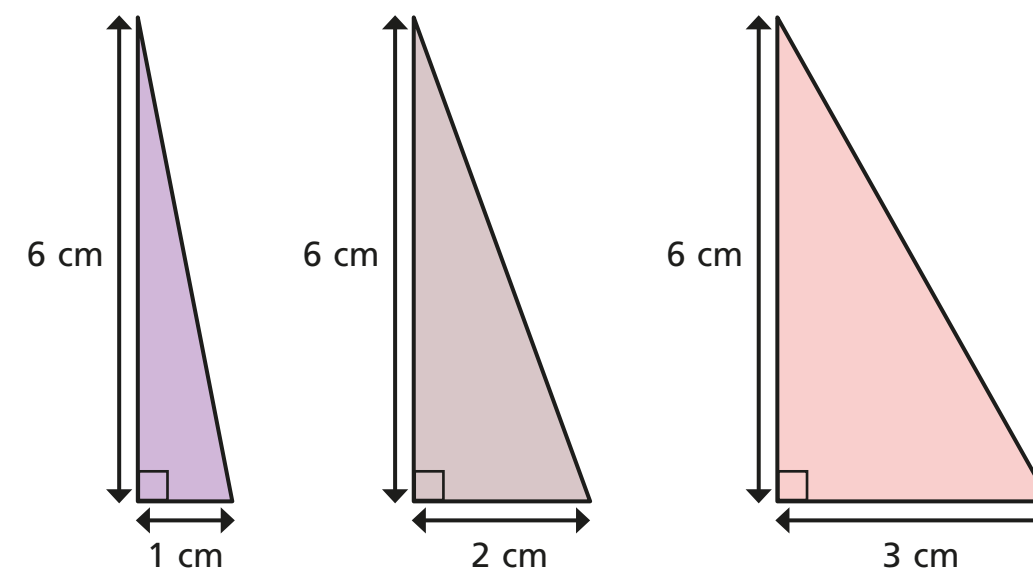
- 5 Insert the correct numbers into the formula to calculate the area of the triangle.



- 6 Calculate the areas of the triangles.



- 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?