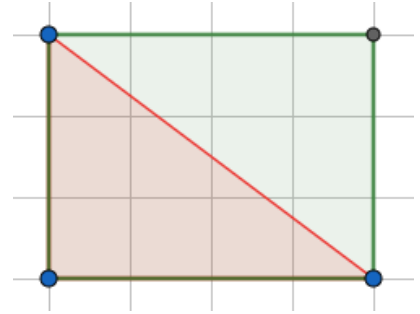


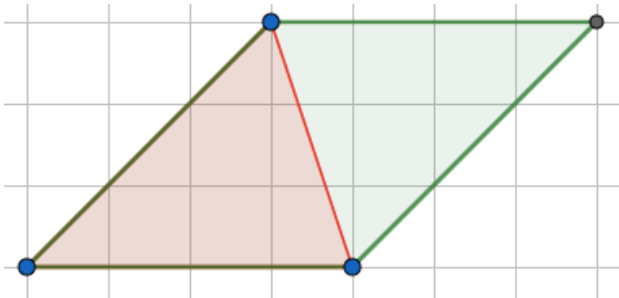
Areas of Triangles

Section A

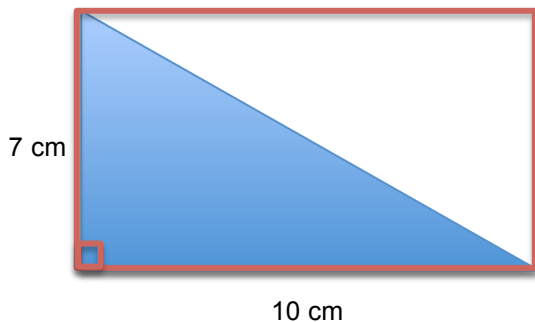
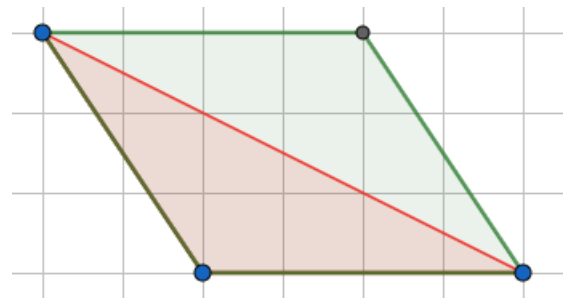
1. a) Find the area of the rectangle.
- b) Find the area of the triangle.
- c) Write a sentence to explain the link between the area of the rectangle and the triangle.



2. a) Show how you could transform the parallelogram into the rectangle from the previous question.
- b) Find the area of the parallelogram
- c) Find the area of the triangle.
- d) Write a sentence to explain the link between the two.

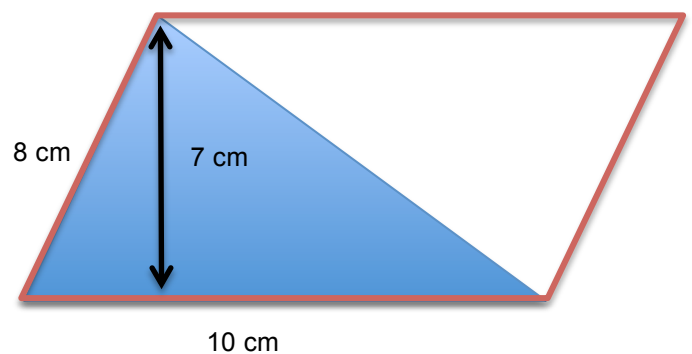


3. a) Find the area of the parallelogram.
- b) Find the area of the triangle.
- c) What is the perpendicular height of this triangle?
- d) Why is this a bit weird?

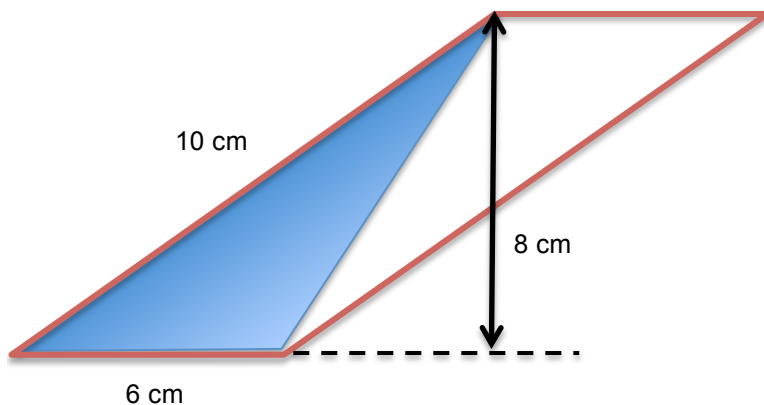


4. a) Find the area of the rectangle.
- b) Use this to find the area of the triangle.
- c) Explain how you used the first area to work out the second.

5. a) Mark the right angle onto the diagram.
- b) Show how you could transform the parallelogram into the rectangle from the previous question.
- c) Find the area of the parallelogram.
- d) Find the area of the triangle.
- e) Explain how you used the first area to work out the second.



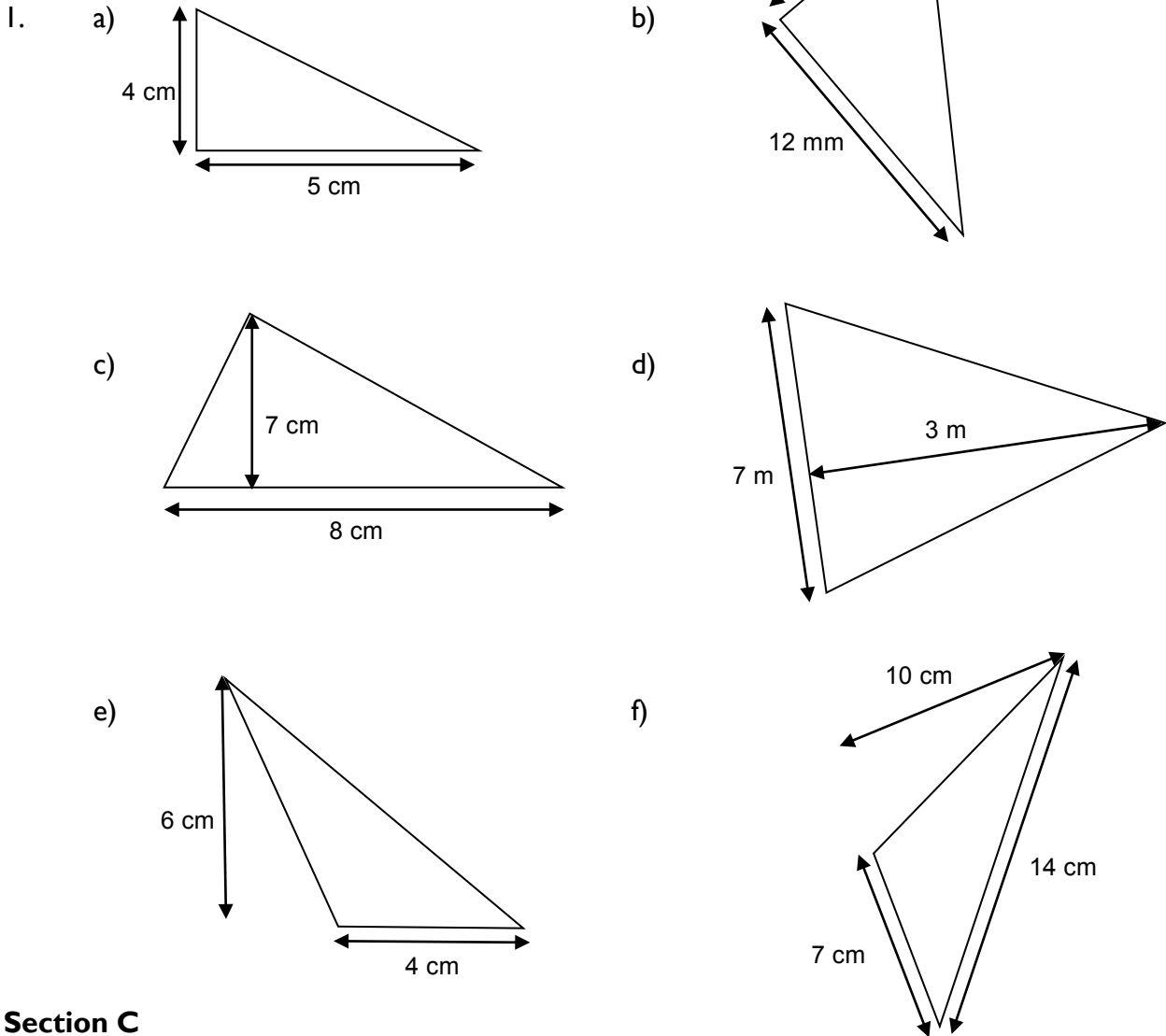
6. a) What is the perpendicular height of this parallelogram.
- b) Find the area of the parallelogram.
- c) Find the area of the triangle.



Section B

For each triangle

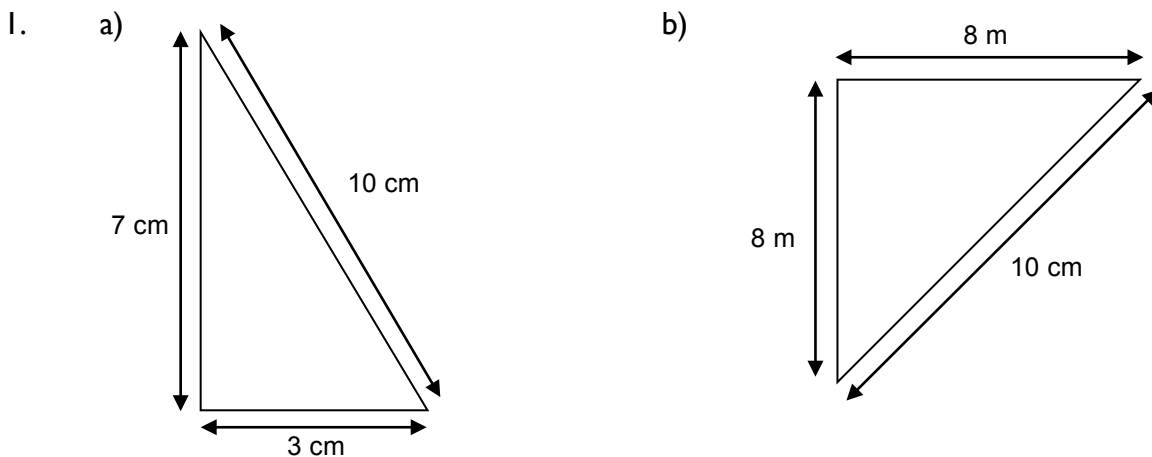
- Mark on any right angles.
- Draw a rectangle or parallelogram around it.
- Find the area of the rectangle or parallelogram
- Hence find the area of the triangle.

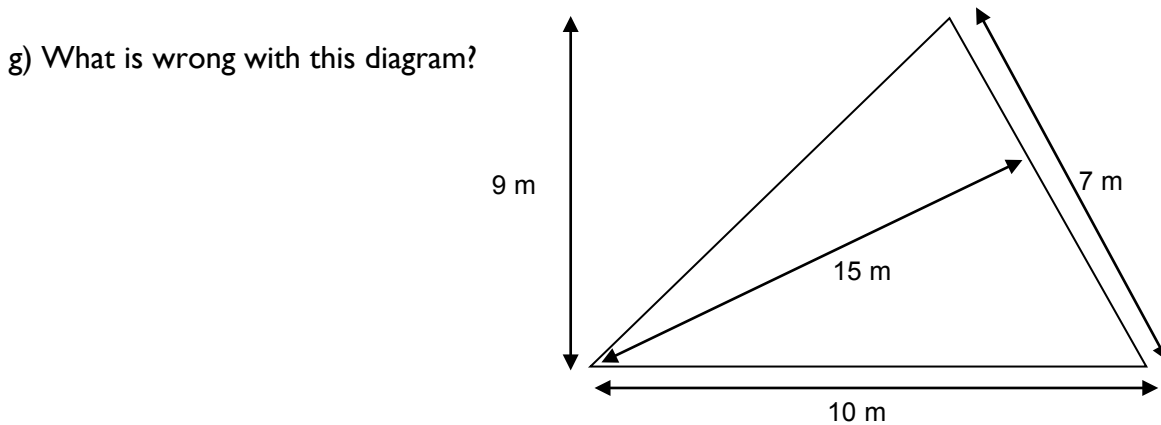
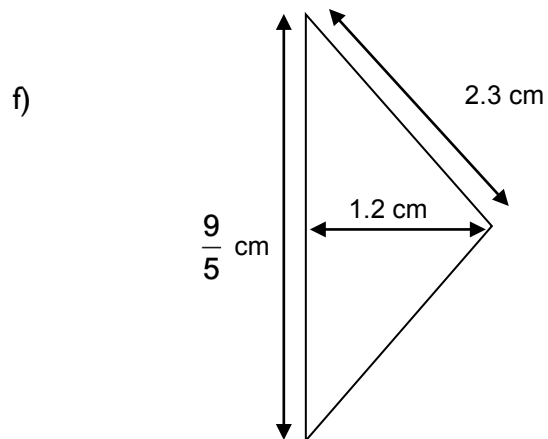
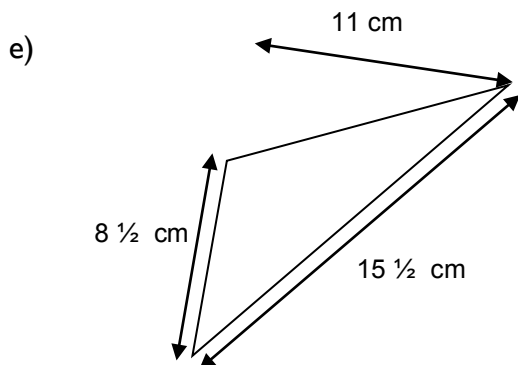
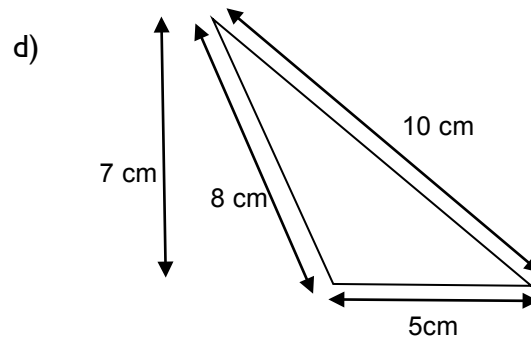
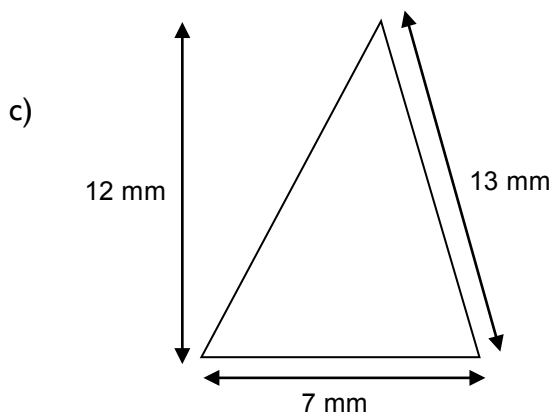


Section C

For each triangle:

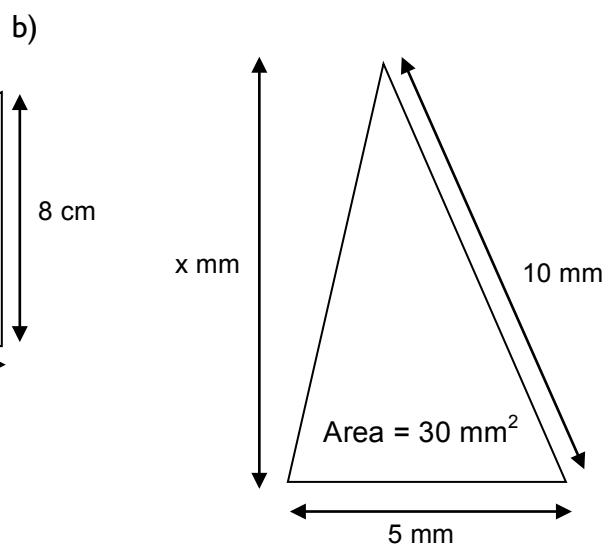
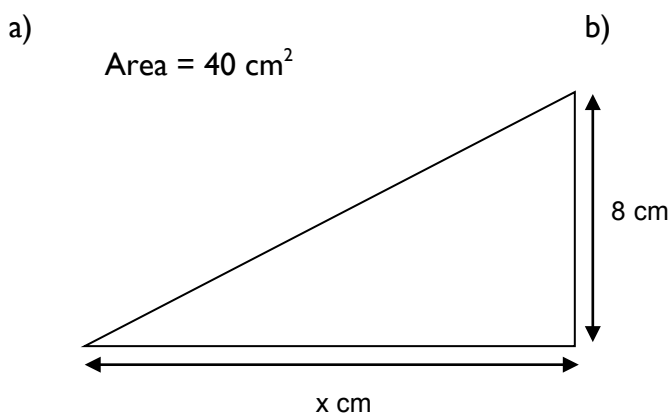
- Mark on any right angles.
- Work out the area of these triangles using the formula $\frac{1}{2} \text{ base} \times \text{perpendicular height}$



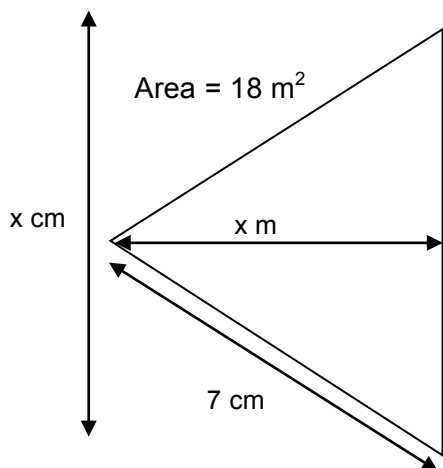


Section D

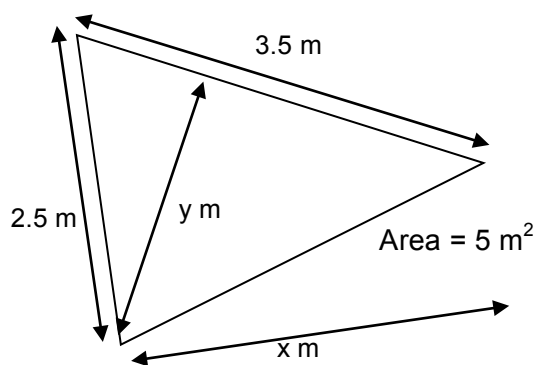
Find the missing lengths.



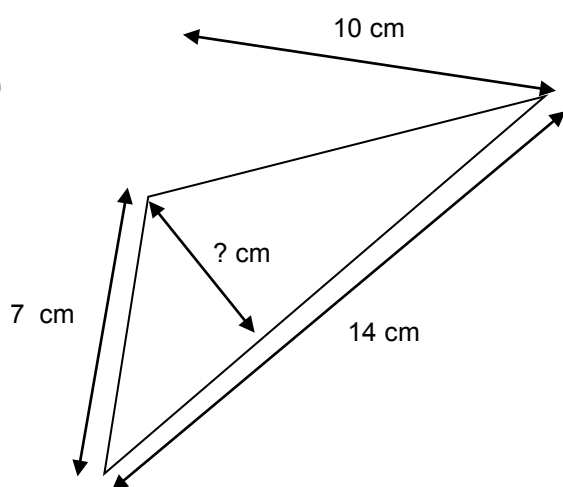
c)



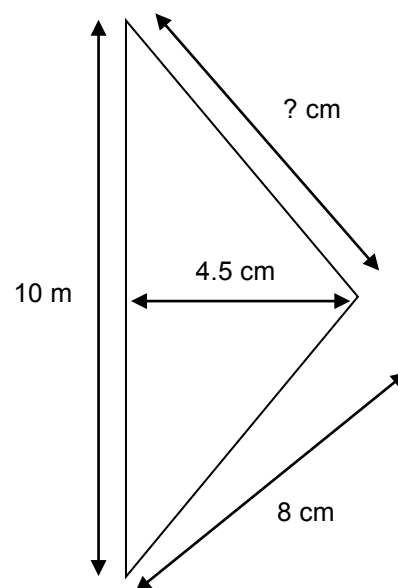
d)



e)

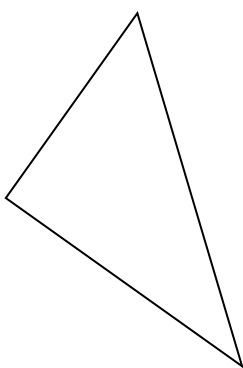


f)

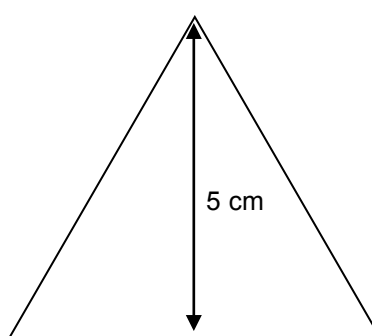


Find the area of these triangles

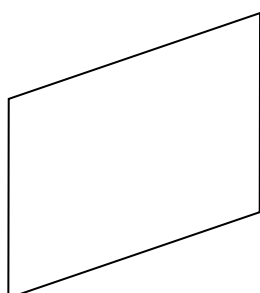
e) Measure the lengths yourself.



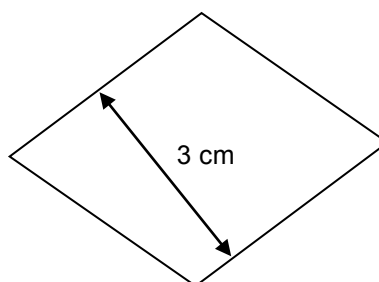
f) The triangle is equilateral and has perimeter 21 cm.



i) Measure the lengths yourself:



j) This shape is a rhombus with perimeter 50 cm.



Draw 2 parallelograms, label useful measurements, and work out the area of each parallelogram. You should illustrate how you are working out the area by drawing a useful rectangle, and working out the area of the rectangle. Make sure you present *all* your working.

Draw 3 triangles, label useful measurements, and work out the area of each triangle. You should illustrate how you are working out the area by drawing a useful rectangle, and working out the area of the rectangle. Make sure you present *all* your working.

You should include both right-angled and non-right-angled triangles.