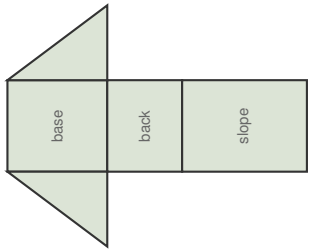
Count the faces before you calculate anything. Some questions are missing a measurement you will have to find for yourself.

1 This is the net of a triangular prism.



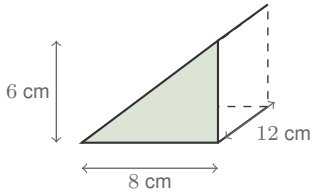
(a) How many faces does the prism have? (1)

(b) How many of them are rectangles? (1)

(c) **Explain why you cannot find the surface area by finding one rectangle and multiplying by three.** (2)

(4 marks)

2 Find the total surface area of this prism.



(a) The two triangles (2)

(b) The three rectangles. The sloping edge of the triangle is 10 cm. (3)

(c) Total surface area (1)

(6 marks)

3 A triangular prism has a right-angled cross-section with shorter sides 3 cm and 4 cm and hypotenuse 5 cm. The prism is 10 cm long. Find its total surface area.

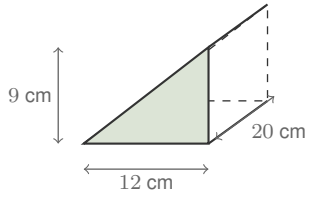
(a) The two triangles (1)

(b) The three rectangles (2)

(c) Total (1)

(4 marks)

4 Find the total surface area of this prism.



(a) Find the length of the sloping edge of the triangle (2)

(b) The two triangles (2)

(c) The three rectangles (3)

(d) Total (1)

(8 marks)

5 A triangular prism has a right-angled cross-section with shorter sides 8 cm and 15 cm. The prism is 10 cm long. Find its total surface area.

(a) The hypotenuse (2)

(b) The two triangles (2)

(c) The three rectangles (2)

(d) Total (1)

(7 marks)

6 A triangular prism has an equilateral cross-section of side 12 cm. The prism is 18 cm long.

(a) Find the perpendicular height of the triangle (3)

(b) Find the area of the two triangles (2)

(c) Find the area of the three rectangles (2)

(d) Total surface area (1)

(8 marks)