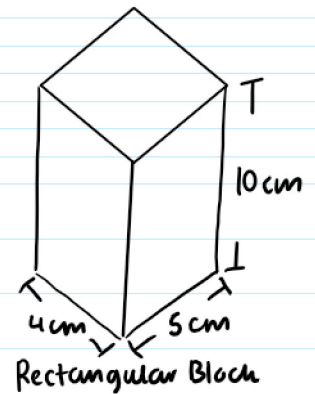
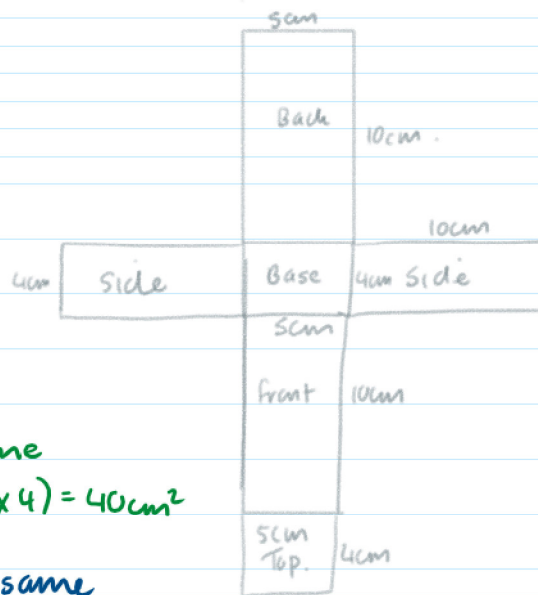


This rectangular block is made up of 6 rectangles.

Sketch the net



From the sketch

Top and base are the same

Area = $2(5 \times 4) = 40 \text{ cm}^2$

Both sides are the same

Area = $2(10 \times 4) = 80 \text{ cm}^2$

Back and the front are the same

Area = $2(10 \times 5) = 100 \text{ cm}^2$

Total surface Area is the area of all the rectangles added together

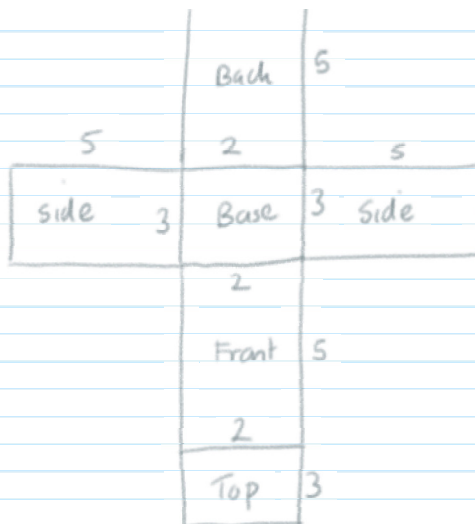
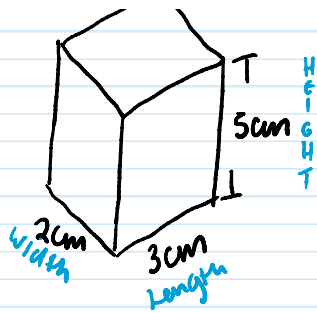
$40 \text{ cm}^2 + 80 \text{ cm}^2 + 100 \text{ cm}^2 = 220 \text{ cm}^2$

Q2) A rectangular block has dimensions 2 cm, 3 cm and 5 cm. Find its total surface area.

- 1) Draw a sketch of the block
- 2) Draw the net of the block
- 3) Find the area of each of the rectangular faces
- 4) To find the total surface area **add** all the areas together

Sketch:





Work out areas

Base and Top: $2(2 \times 3) = 12 \text{ cm}^2$

Sides: $2(5 \times 3) = 30 \text{ cm}^2$

Back and front: $2(2 \times 5) = 20 \text{ cm}^2$

Total surface area = $12 + 30 + 20 = 62 \text{ cm}^2$

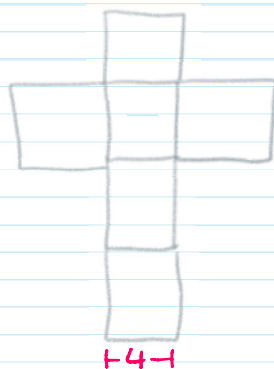
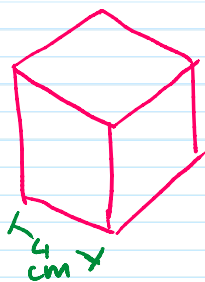
A formula for surface area of a rectangular block

Area = $2(lw + lh + wh)$ where l = length, w = width, h = height

$l=3, w=2, h=5 \Rightarrow$ sub into formula. use brackets when subbing

A = $2((3)(2) + (3)(5) + (2)(5))$ Brackets \rightarrow multiply
 $2(6 + 15 + 10)$
 $2(31)$
 $= 62 \text{ cm}^2$

Find the surface area of the cube



Area of each square = l^2

6 faces on a cube

Area = $6l^2$

Area = $6(4)^2 = 96 \text{ cm}^2$