Area, Perimeter & Volume

SAINT JOHN'S

Fluency:

4 cm
3 cm | B | 6 cm
2 cm | A

4 cm
3 cm | D | 6 cm
2 cm | C

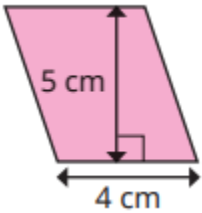Work out the areas of the rectangles to work out the areas of the rectilinear shapes.

4 cm
6 cm
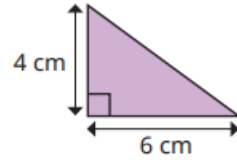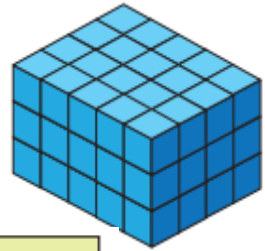
$area = \frac{1}{2} \times base \times perpendicular\ height$

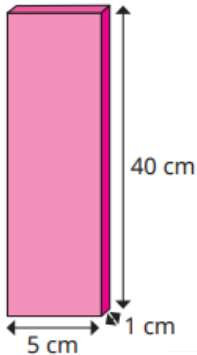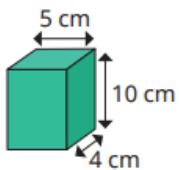$area = \frac{1}{2} \times 6 \times 4 = \frac{1}{2} \times 24 = 12\ cm^2$

5 cm
4 cm

area = base × perpendicular height
= 4 cm × 5 cm
= 20 cm²

volume = length × width × height

Problem Solving:

Which cuboid has the greater volume?

5 cm
10 cm
4 cm

40 cm
5 cm
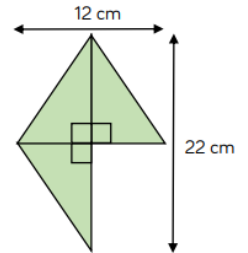1 cm

What is the same about these two triangles?
What is different?
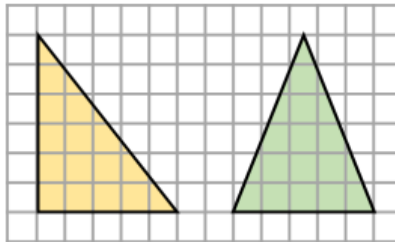
The shape is made of three identical triangles.

12 cm
22 cm

What is the area of the shape?

Mathematical Talk:
Why is it useful to know your times-tables when calculating area?
How do we work out the area and perimeter of shapes? Can you show this as a formula?
What does estimate mean?
What is the relationship between the area of a rectangle and the area of a right-angled triangle?

Key Skills: Use estimation to check answers to calculations and determine an appropriate degree of accuracy