1. Calculate the area of this shape.

16 cm   12 cm

20 cm

$96cm^2$

....

(2 marks)

2. Calculate the area of this shape.

7 cm   4 cm

12 cm
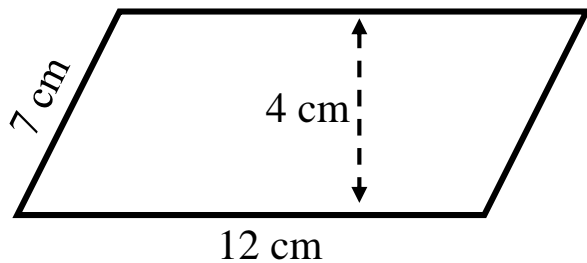
$48cm^2$

....

(2 marks)

3. Calculate the volume and surface area of the cube below.
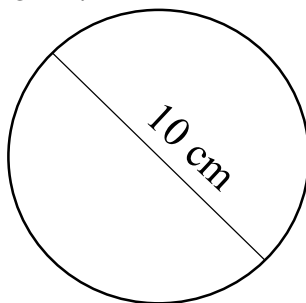
5 cm

3 cm

9 cm

4 cm
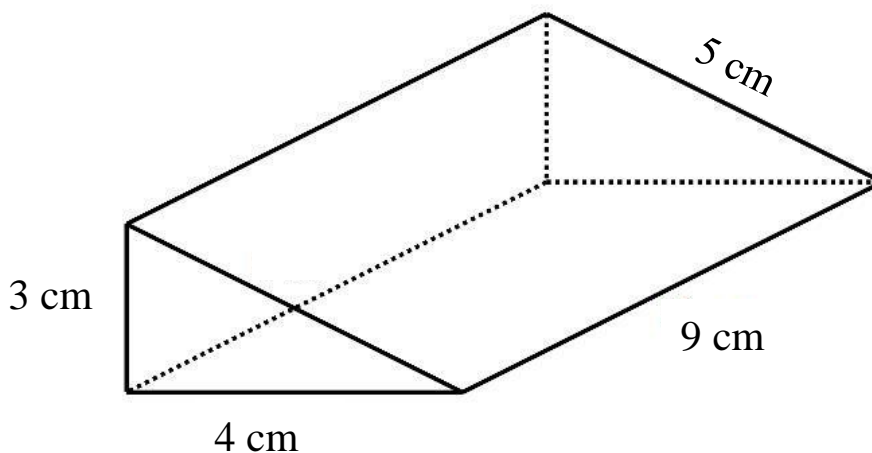
Volume = ... $54cm^3$

Surface area = ... $120cm^2$

(5 marks)

3. Calculate the circumference of this circle.
   Leave your answer in terms of π.

10 cm

10π

....

(2 marks)

4. Two sides of a right angle triangle are 5cm and 10cm.
   There are two possible answers for the third side.
   Round your answers to 1 decimal place.
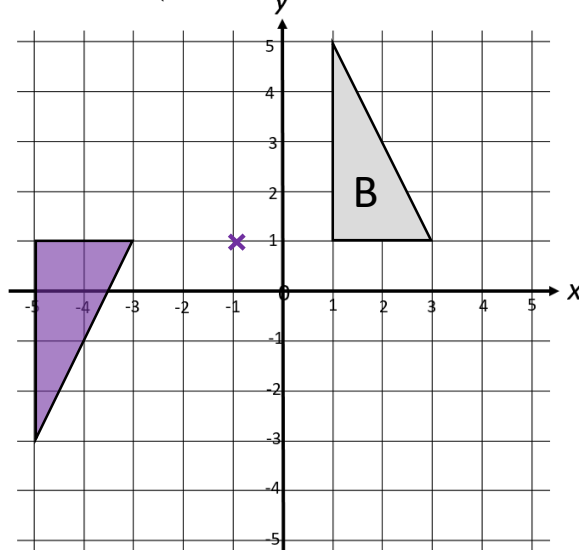
$11.2cm \ or \ 8.7cm$

....

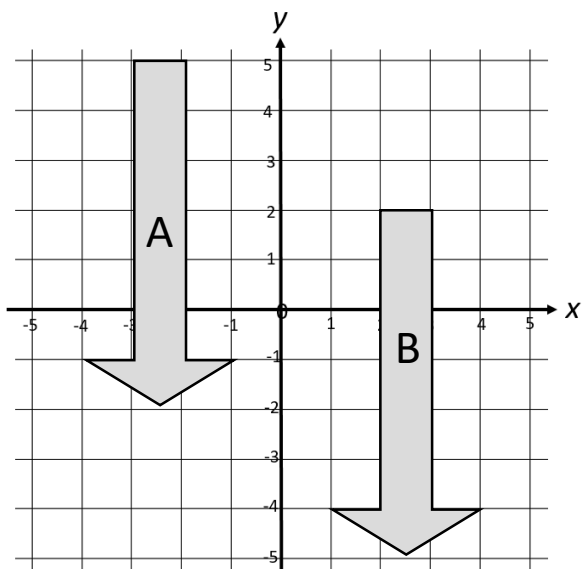(2 marks)

5. Reflect shape *A* in the line $y = 0$
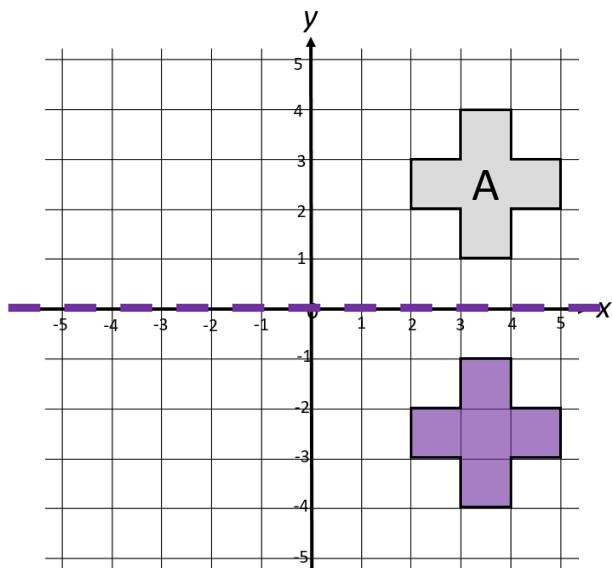
(2 marks)

6. Rotate shape *B* by 90° CW about the center (-1 , 1)

(2 marks)

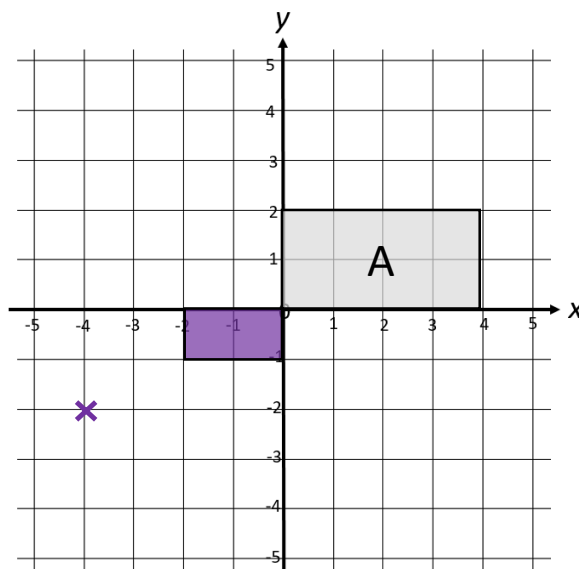7. Describe the single transformation from shape A to B.

Translation

Vector $\begin{pmatrix} 5 \\ -3 \end{pmatrix}$

(2 marks)

8. Enlarge shape *A* by scale factor $\frac{1}{2}$ from the center (-4 , -2)

(2 marks)

Score =