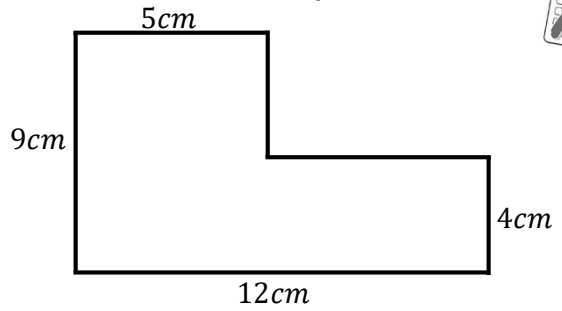
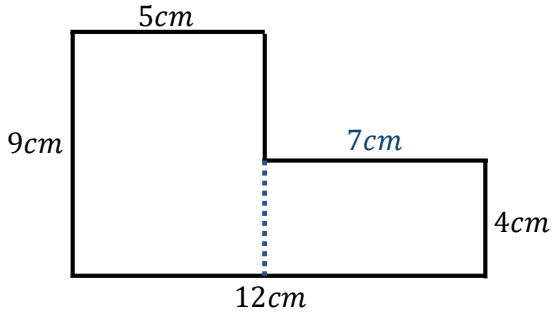
Find the area of this shape



Split the shape into rectangles.



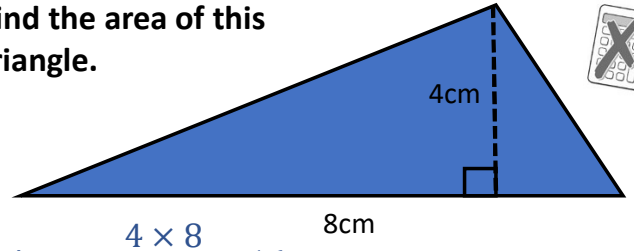
$5 \times 9 = 45$

$7 \times 4 = 28$

$28 + 45 = 73$

$\boldsymbol{Area = 73\ cm^2}$

Find the area of this triangle.

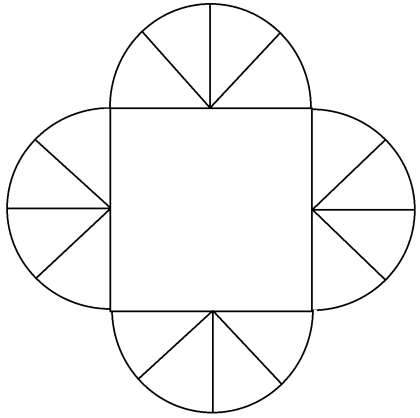


$Area = \frac{4 \times 8}{2} = 16$

$\boldsymbol{Area = 16\ cm^2}$

Sunny is required to make the shape below out of metal bar. The shape is made up of a square of side length 20cm, and 4 identical semicircles, each with the same diameter that is equal to the side length of the square. Each semicircle has 3 bars that go from the centre to the edge of the semicircle. Find the total amount of length of metal bar required to make this shape.

Use $\pi = 3.14$



$20 \times 4 = 80$

Circumference of a semicircle $= 2\pi r \div 2$

$= 2 \times \pi \times 10 \div 2 = 31.4$

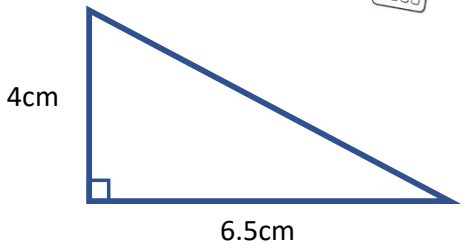
$31.4 \times 4 = 125.6$

12 bars that are each 10cm long $= 12 \times 00 = 120$

$120 + 80 + 125.6 = 325.6$

$\boldsymbol{325.6\ cm}$ **of metal bar**

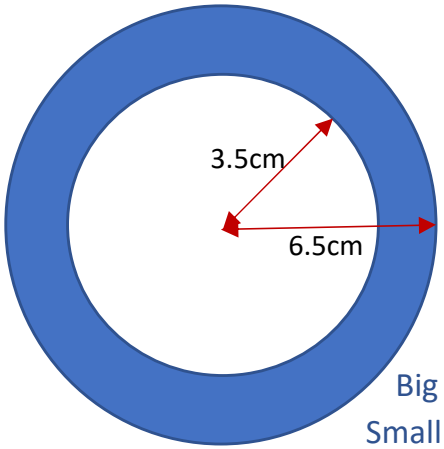
Find the area of this right-angle triangle



$Area = \frac{4 \times 6.5}{2} = 13$

$\boldsymbol{Area = 13\ cm^2}$

Find the area of the blue ring. **Use $\boldsymbol{\pi = 3.14}$**



Area of a circle $= \pi r^2$

$= 3.14 \times r \times r$

Big Circle $= 3.14 \times 6.5 \times 6.5 = 132.665$

Small Circle $= 3.14 \times 3.5 \times 3.5 = 38.465$

$132.665 - 38.465 = 94.2$

$\boldsymbol{Area\ of\ Blue\ Ring = 94.2\ cm^2}$