



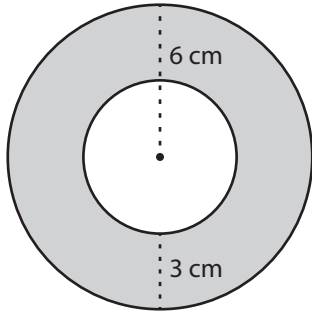
Area of Concentric Circles

Name _____

Score _____

AC:38

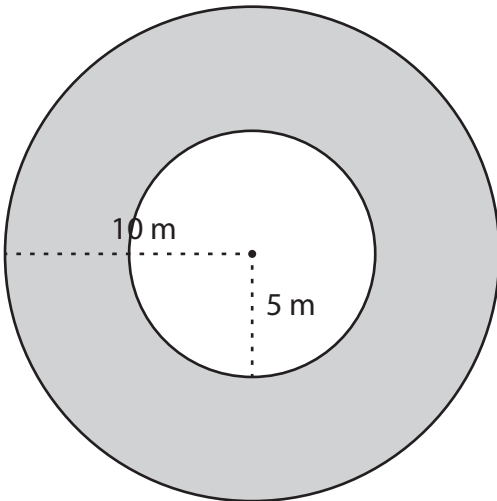
Example : Find the area of the shaded region. (Use $\pi = \frac{22}{7}$ or 3.14)



$$\begin{aligned} \text{Area of shaded region} &= \text{Area of the outer circle} - \text{Area of the inner circle} \\ &= \pi R^2 - \pi r^2 \quad ; \quad R = 6 \text{ cm} , \quad r = (6 - 3 = 3) \text{ cm} \\ &= \pi(R^2 - r^2) \\ &= 3.14 \times (6^2 - 3^2) \\ &= 3.14 \times (36 - 9) = 3.14 \times 27 = \mathbf{84.78 \text{ cm}^2} \end{aligned}$$

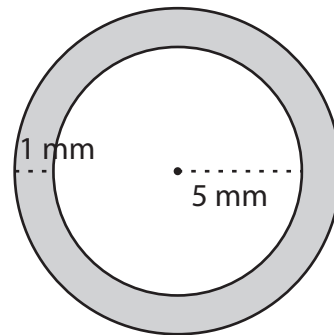
Find the area of the shaded region. (Use $\pi = \frac{22}{7}$ or 3.14)

1)



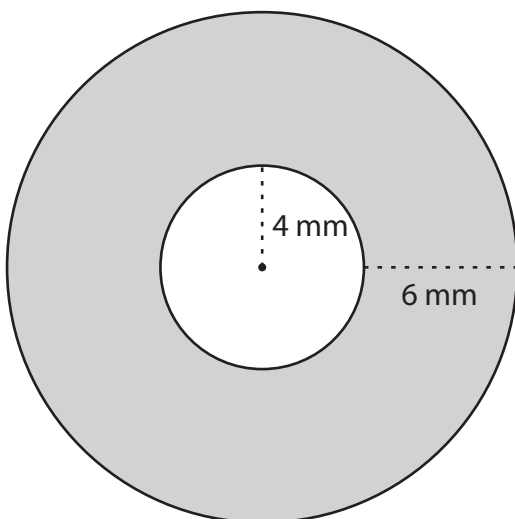
Area = _____ m²

2)



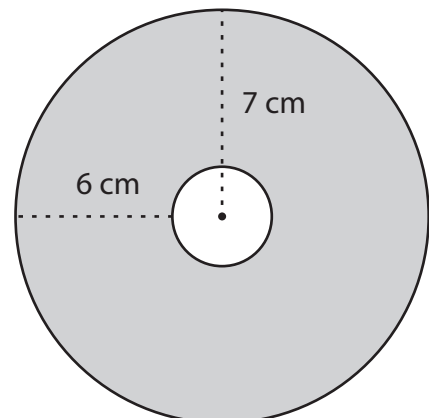
Area = _____ mm²

3)



Area = _____ mm²

4)



Area = _____ cm²



Area of Concentric Circles

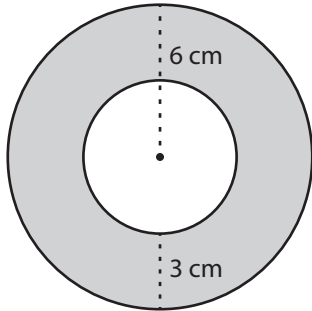
Name _____

Score _____

Answer key

AC:38

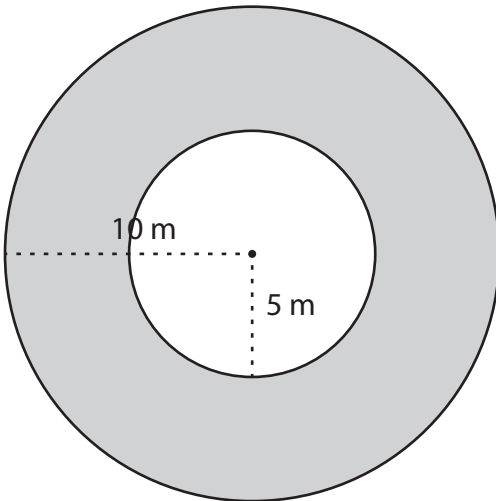
Example : Find the area of the shaded region. (Use $\pi = \frac{22}{7}$ or 3.14)



$$\begin{aligned}
 \text{Area of shaded region} &= \text{Area of the outer circle} - \text{Area of the inner circle} \\
 &= \pi R^2 - \pi r^2 \quad ; \quad R = 6 \text{ cm} , \quad r = (6 - 3 = 3) \text{ cm} \\
 &= \pi(R^2 - r^2) \\
 &= 3.14 \times (6^2 - 3^2) \\
 &= 3.14 \times (36 - 9) = 3.14 \times 27 = \mathbf{84.78 \text{ cm}^2}
 \end{aligned}$$

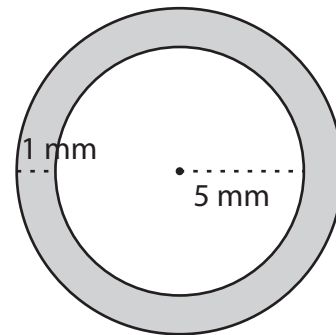
Find the area of the shaded region. (Use $\pi = \frac{22}{7}$ or 3.14)

1)



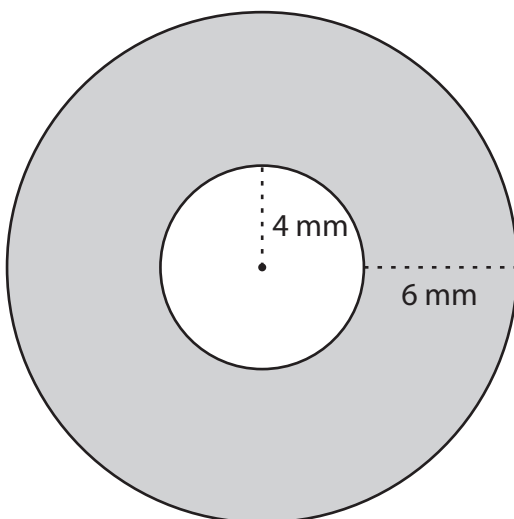
Area = 235.5 m²

2)



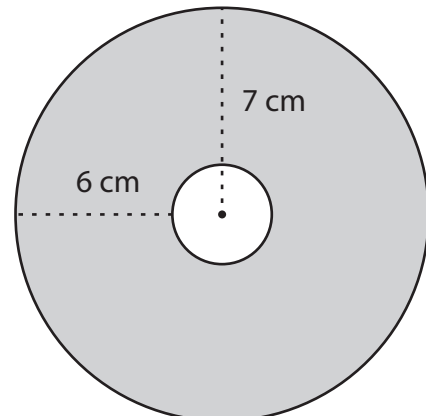
Area = 34.54 mm²

3)



Area = 263.76 mm²

4)



Area = 150.72 cm²