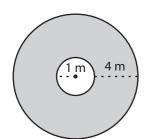
Area of Concentric Circles

Score _____

AC:39

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

Area of shaded region = Area of the outer circle - Area of the inner circle



$$= \pi(R^2 - r^2)$$

$$= \pi R^2 - \pi r^2$$
; R = (1 + 4 = 5) m, r = 1 m

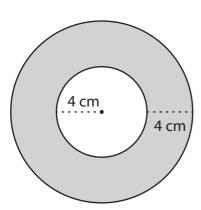
$$= \pi(R^2 - r^2)$$

$$= 3.14 \times (5^2 - 1^2)$$

$$= 3.14 \times (25 - 1) = 3.14 \times 24 = 75.36 \text{ m}^2$$

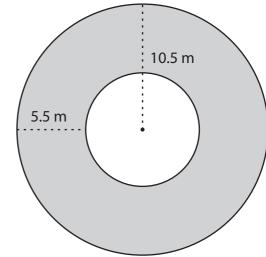
Find the area of the shaded region. (Use $\pi = \frac{22}{7}$ or 3.14)

1)

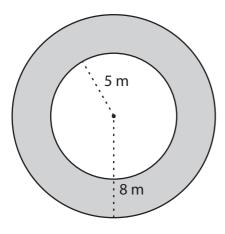


Area =
$$_{\text{cm}^2}$$
 cm²

2)

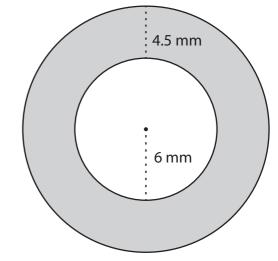


3)



Area =
$$m^2$$

4)

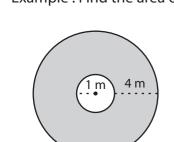


Area of Concentric Circles

Score ____

AC:39

Answer key



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

Area of shaded region = Area of the outer circle - Area of the inner circle

$$= \pi R^2 - \pi r^2$$
 ; $R = (1 + 4 = 5) \text{ m}$, $r = 1 \text{ m}$

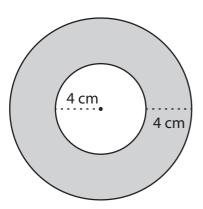
$$= \pi(R^2 - r^2)$$

$$= 3.14 \times (5^2 - 1^2)$$

$$= 3.14 \times (25 - 1) = 3.14 \times 24 = 75.36 \,\mathrm{m}^2$$

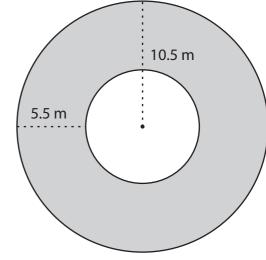
Find the area of the shaded region. (Use $\pi = \frac{22}{7}$ or 3.14)

1)



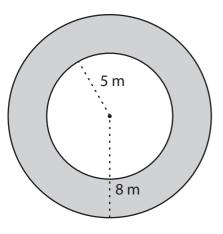
Area = 150.72 cm²

2)



Area = 267.685 m^2

3)



Area = **122.46** m²

4.5 mm

Area = 233.145 mm²