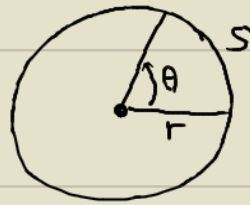


10.

$$\frac{\sqrt{3} \text{ rad}}{1} \cdot \frac{180^\circ}{\pi \text{ rad}}$$

$$\frac{\sqrt{3} \cdot 180^\circ}{\pi}$$

$$99.24^\circ$$



11. $r = 3 \text{ ft}$ $\theta = 4$

$S = r\theta$

* θ MUST BE IN RADIANS

$S = (3 \text{ ft})(4)$

$S = 12 \text{ ft}$

12. $r = 7 \text{ m}$ $\theta = 60^\circ$

$$\frac{60^\circ}{1} \cdot \frac{\pi}{180^\circ}$$

$$\frac{60\pi}{180}$$

$$\theta = \frac{\pi}{3}$$

$S = r\theta$

$S = (7 \text{ m})\left(\frac{\pi}{3}\right)$

$S = \frac{7\pi}{3} \text{ m}$

$S = 7.33 \text{ m}$

13. $A = \frac{1}{2} r^2 \theta$

* θ MUST BE
IN RADIANS

$\theta = \frac{1}{5}$

$A = 4 \text{ cm}^2$

$4 \text{ cm}^2 = \frac{1}{2} r^2 \left(\frac{1}{5}\right)$

$4 \text{ cm}^2 = \frac{1}{10} r^2$

$10(4 \text{ cm}^2) = 10\left(\frac{1}{10} r^2\right)$

$40 \text{ cm}^2 = r^2$

$r = \sqrt{40 \text{ cm}^2}$

$r = \sqrt{2 \cdot 2 \cdot 2 \cdot 5 \cdot \text{cm} \cdot \text{cm}}$

$r = 2 \text{ cm} \sqrt{10}$

$= 2\sqrt{10} \text{ cm}$

$r = 6.325 \text{ cm}$