Circles Worksheet 5 - Answers

1. Given $r = 2.0$ cm and $\theta = \frac{\pi}{3}$, find s.
   $\frac{2\pi}{3}$ cm ≈ 2.1 cm.

2. Given $r = 9.4$ mm and $\theta = \frac{\pi}{4}$, find s.
   $\frac{9.4\pi}{4}$ mm ≈ 7.4 mm.

3. Given $s = 20$ ft and $\theta = 90°$, find r.
   $\frac{40}{\pi}$ ft ≈ 12.7 ft.

4. Given $s = 10.2$ mi and $\theta = 30°$, find r.
   $\frac{61.2}{\pi}$ ft ≈ 19.5 ft

5. Given $s = 43.2$ m and $r = 21.4$ m, find θ.
   2.02 radians $\approx 115.7°$

6. Given $s = 99.2$ mm and $r = 87.4$ mm, find θ.
   1.14 radians $\approx 65.0°$.

7. Given $r = 4.5$ in and $\theta = \frac{\pi}{6}$, find the area of the sector.
   5.30 in^2

8. Given $r = 1.25$ ft and $\theta = \frac{\pi}{8}$, find the area of the sector.
   0.307 ft^2

9. Given $A = 19.2$ in^2 and $\theta = \frac{\pi}{4}$, find r.
   6.99 in

10. Given $A = 6.10$mm^2 and $r = 3.40$ mm, find θ.
    1.06 radians $\approx 60.5°$