

8-6 Length of Arcs

Name _____

Given the measurement of a central angle and the radius, find the measure of its intercepted arc. Show your work on a separate piece of paper.

Remember that $s = r \cdot \theta$

- | | | |
|-----------|----------------|---------------------------|
| _____ 1. | radius = 5 cm | $\theta = \frac{\pi}{6}$ |
| _____ 2. | radius = 3 cm | $\theta = \frac{3\pi}{4}$ |
| _____ 3. | radius = 12 cm | $\theta = 45^\circ$ |
| _____ 4. | radius = 8 cm | $\theta = \frac{5\pi}{4}$ |
| _____ 5. | radius = 6 cm | $\theta = 50^\circ$ |
| _____ 6. | radius = 24 cm | $\theta = \frac{\pi}{4}$ |
| _____ 7. | radius = 30 cm | $\theta = 100^\circ$ |
| _____ 8. | radius = 6 cm | $\theta = 150^\circ$ |
| _____ 9. | radius = 14 cm | $\theta = \frac{5\pi}{3}$ |
| _____ 10. | radius = 12 cm | $\theta = 350^\circ$ |