Practice worksheet | Trigonometry

Arc length and sector area

Name: _____ Date: _____

6 questions | 18 marks

1. Find arc length for $r = 10$ cm, $\theta = \frac{\pi}{5}$. [3 marks]

2. Find sector area for $r = 5$ m, $\theta = 1.2$ rad. [3 marks]

3. Find the exact arc for radius 8 cm and angle 135°. [3 marks]

4. A sector has radius 7 cm and arc 14 cm. Find angle and area. [3 marks]

5. Find the full perimeter of a sector $r = 4$ cm, $\theta = \frac{\pi}{2}$. [3 marks]

6. A 12 m² sector has radius 4 m. Find its angle in radians and degrees to one decimal place. [3 marks]