

Name: _____

1. $\frac{2}{9}$

2. $164^\circ 28' 46''$

3. $x = 16.5$ meters
 $y = 24^\circ 35'$

4. $-\frac{\sqrt{29}}{2}$

5. Length of arc: $\frac{15}{2}$ cm or 7.5 cm

Area of shaded region: Not tested

6. 4.55, 4.87

7. $y = 5\sin 2x + \frac{1}{3}$

8.
$$\frac{\frac{\sin}{\cos} + 1}{\frac{1}{\cos}} = \frac{\frac{\sin}{\cos} + \frac{\cos}{\cos}}{\frac{1}{\cos}} = \frac{\frac{\sin + \cos}{\cos}}{\frac{1}{\cos}} = \frac{\sin + \cos}{\cos} \cdot \frac{\cos}{1} = \sin + \cos$$

9. $\frac{6}{\sqrt{85}}$

10. 27 meters