

Practice**Angles and Radian Measure**

Change each degree measure to radian measure in terms of π .

1. -250°

2. 6°

3. -145°

4. 870°

5. 18°

6. -820°

Change each radian measure to degree measure. Round to the nearest tenth, if necessary.

7. 4π

8. $\frac{13\pi}{30}$

9. -1

10. $\frac{3\pi}{16}$

11. -2.56

12. $-\frac{7\pi}{9}$

Evaluate each expression.

13. $\tan \frac{\pi}{4}$

14. $\cos \frac{3\pi}{2}$

15. $\sin \frac{3\pi}{2}$

16. $\tan \frac{11\pi}{6}$

17. $\cos \frac{3\pi}{4}$

18. $\sin \frac{5\pi}{3}$

Given the measurement of a central angle, find the length of its intercepted arc in a circle of radius 10 centimeters. Round to the nearest tenth.

19. $\frac{\pi}{6}$

20. $\frac{3\pi}{5}$

21. $\frac{\pi}{2}$

Find the area of each sector, given its central angle θ and the radius of the circle. Round to the nearest tenth.

22. $\theta = \frac{\pi}{6}, r = 14$

23. $\theta = \frac{7\pi}{4}, r = 4$