

Math 3 Unit 8 Worksheet 5

Introduction to Radians

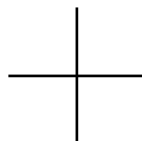
**** Scientific calculator not allowed ****

Name: _____

Date: _____ **Per:** _____

[1-18]: A) Sketch each angle in standard position. B) Identify the quadrant for the terminating ray; however, if it's a quadrantal, identify the two quadrants it's between. C) Identify the reference angle; however, if it's a quadrantal, identify it as such.

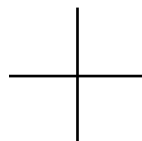
1. $\theta = \frac{3\pi}{5}$



b) Quadrant _____

c) Ref \angle = _____

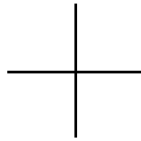
2. $\theta = \frac{11\pi}{9}$



b) Quadrant _____

c) Ref \angle = _____

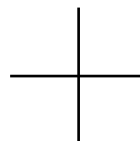
3. $\theta = \frac{5\pi}{18}$



b) Quadrant _____

c) Ref \angle = _____

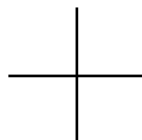
4. $\theta = \frac{8\pi}{5}$



b) Quadrant _____

c) Ref \angle = _____

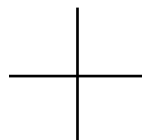
5. $\theta = \frac{3\pi}{2}$



b) Quadrant _____

c) Ref \angle = _____

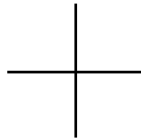
6. $\theta = \frac{7\pi}{3}$



b) Quadrant _____

c) Ref \angle = _____

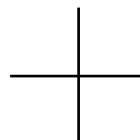
7. $\theta = \frac{3\pi}{4}$



b) Quadrant _____

c) Ref \angle = _____

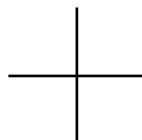
8. $\theta = \frac{15\pi}{8}$



b) Quadrant _____

c) Ref \angle = _____

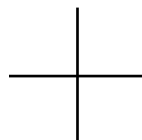
9. $\theta = \frac{17\pi}{5}$



b) Quadrant _____

c) Ref \angle = _____

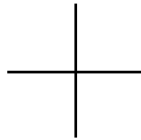
10. $\theta = \frac{5\pi}{9}$



b) Quadrant _____

c) Ref \angle = _____

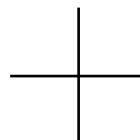
11. $\theta = \frac{9\pi}{2}$



b) Quadrant _____

c) Ref \angle = _____

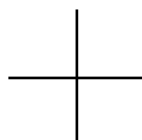
12. $\theta = \frac{16\pi}{7}$



b) Quadrant _____

c) Ref \angle = _____

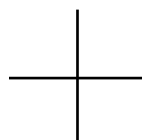
13. $\theta = 3\pi$



b) Quadrant _____

c) Ref \angle = _____

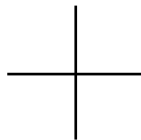
14. $\theta = \frac{19\pi}{6}$



b) Quadrant _____

c) Ref \angle = _____

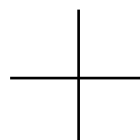
15. $\theta = \frac{5\pi}{8}$



b) Quadrant _____

c) Ref \angle = _____

16. $\theta = \frac{11\pi}{7}$

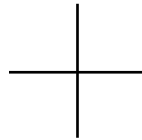
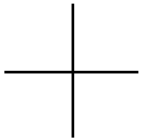


b) Quadrant _____

c) Ref \angle = _____

17. $\theta = -\frac{\pi}{4}$

18. $\theta = -\frac{\pi}{3}$



b) Quadrant _____

b) Quadrant _____

c) Ref $\angle =$ _____

c) Ref $\angle =$ _____

[19-24]: A) Find the complement for each angle. B) Find the supplement for each angle.

19. $\theta = \frac{2\pi}{5}$

20. $\theta = \frac{3\pi}{8}$

21. $\theta = \frac{3\pi}{7}$

22. $\theta = \frac{\pi}{3}$

23. $\theta = \frac{\pi}{4}$

24. $\theta = \frac{\pi}{6}$

a) C: _____

a) C: _____

a) C: _____

a) C: _____

a) C: _____

a) C: _____

b) S: _____

b) S: _____

b) S: _____

b) S: _____

b) S: _____

b) S: _____

[25-30]: A) Find a positive coterminal angle and a negative coterminal angle for each.

25. $\theta = \frac{7\pi}{4}$

26. $\theta = \frac{5\pi}{6}$

27. $\theta = \frac{4\pi}{3}$

28. $\theta = \frac{5\pi}{4}$

29. $\theta = \frac{11\pi}{6}$

30. $\theta = \frac{2\pi}{3}$

a) P: _____

a) P: _____

a) P: _____

a) P: _____

a) P: _____

a) P: _____

N: _____

N: _____

N: _____

N: _____

N: _____

N: _____

[31-33]: Review: Find the ordered pair on the unit circle for each angle.

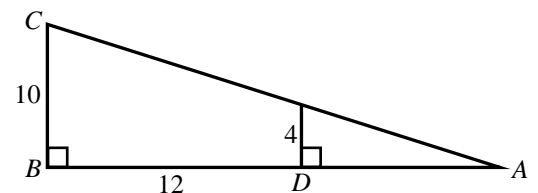
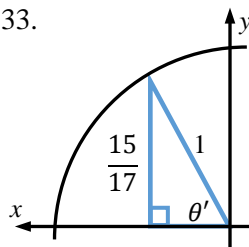
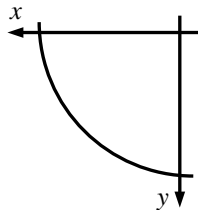
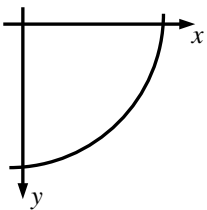
31. $\theta = 315^\circ$

32. $\theta = 210^\circ$

33.

[34]: Review.

34. Find $\sin A$, $\cos A$, & $\tan A$.



$\sin A =$ _____

$\cos A =$ _____

$\tan A =$ _____