

4.1

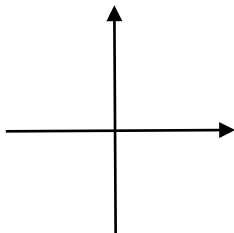
Angles and Their Measure
Homework

Name _____

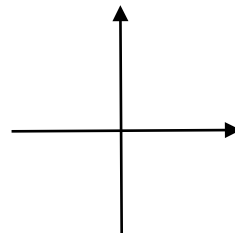
Date _____ Period _____

Problems 1 – 4, Draw each angle, then state the reference angle.

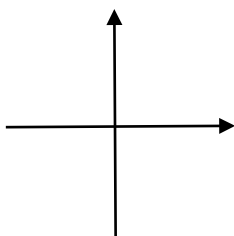
1. 135°



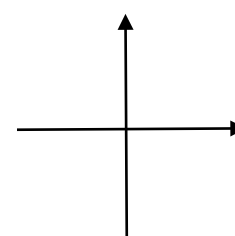
2. 450°



3. $-\frac{\pi}{6}$



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

**Problems 5– 8**, Convert each angle to a decimal in degrees. Round your answer to two decimal places.

5. $62^\circ 45' 28''$

6. $105^\circ 18' 7''$

7. $73^\circ 20' 20''$

8. $234^\circ 8' 25''$

Problems 9 – 12, Convert each angle to $D^\circ M'S''$ form. Round your answer to the nearest second.

9. 47.35°

10. 18.43°

11. 31.57°

12. 29.99°

Problems 13 – 18, Convert each angle in degrees to radians. Express your answer as a multiple of π .

13. 150°

14. -75°

15. -140°

16. 420°

17. -220°

18. 315°

Problems 19 – 24, Convert each angle in radians to degrees.

19. $\frac{7\pi}{12}$

20. $\frac{9\pi}{2}$

21. $-\frac{5\pi}{6}$

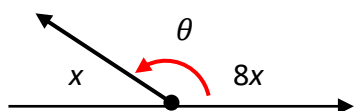
22. 5π

23. $-\frac{5\pi}{3}$

24. $\frac{7\pi}{4}$

Problems 25 – 26, Find the measure of θ , in radians and degrees.

25.



26.

