

4.1 Radian and Degree Measure

Name:

Date: May 20, 2013

P 17. Determine the quadrant in which each angle lies.

(a) $\frac{\pi}{4}$

(b) $\frac{5\pi}{4}$

P 20. Determine the quadrant in which each angle lies.

(a) $-\frac{5\pi}{6}$

(b) $-\frac{11\pi}{9}$

P 22. Determine the quadrant in which each angle lies.

(a) 6.02

(b) -4.25

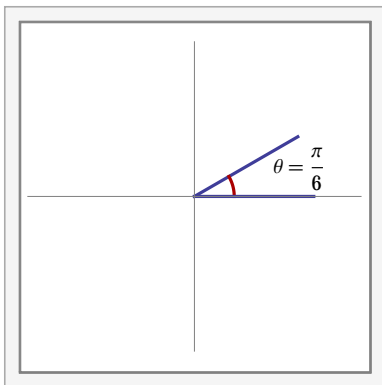
P 26. Sketch each angle in standard position

(a) 4

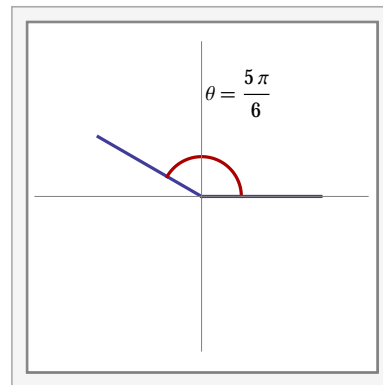
(b) 7π

P 27. Determine two coterminal angles (one positive and one negative) for each angle. Give your answers in radians.

(a)



(b)



P 61. Rewrite each angle in radian measure.

(a) -270°

(b) 144°

P 64. Rewrite each angle in degree measure.

(a) $\frac{11\pi}{6}$

(b) $\frac{34\pi}{15}$

P 118. A car's rear windshield wiper rotates 125° . The total length of the wiper mechanism is 25 inches and wipes the windshield over a distance of 14 inches. Find the area covered by the wiper.

P 127. Prove that the area of a circular sector of radius r with central angle θ is $A = \frac{1}{2}\theta r^2$, where θ is measured in radians.