4960 miles

Give the quadrant in which the terminal side of the angle lies if $\theta = 2.4$

# Quadrant II

Give a positive and negative coterminal angle for $\frac{11\pi}{6}$

$$\frac{23\pi}{6}, -\frac{\pi}{6}$$

Give a positive and negative coterminal angle for $-\frac{5\pi}{6}$

$$\frac{7\pi}{6}, -\frac{17\pi}{6}$$

Give the complement and supplement of $\frac{2\pi}{21}$

$$\frac{17\pi}{42}, \frac{19\pi}{21}$$

Convert to decimal degrees (to the nearest thousandth): $135° 16' 45"$

135.279°

Convert to DMS (to the nearest second):

135.29°

135° 17' 24"

Convert to radians (to the nearest thousandth): 94°

# 1.641

Convert to radians (to the nearest thousandth) : -72°

-1.257

Convert to degrees (to the nearest thousandth):

$$\frac{5\pi}{7}$$

$$128.571°$$

Convert to degrees : $\frac{3\pi}{5}$

108°

Find the radian measure of the central angle of a circle with a radius of 12 ft that intercepts an arc of length 25 ft. Round to the nearest thousandth.

# 2.083

Find the exact value of the length of the arc on a circle with a radius of 20 feet intercepted by a central angle of 138°.

$\frac{46\pi}{3}$ feet

Find the length (to the nearest thousandth) of the arc on a circle with a radius of 15 feet intercepted by a central angle of 60°.

# 15,708 feet

Determine the north-south distance (to the nearest mile) from Perth, Australia, which has latitude of 31°58' S to Beijing, China, which has a latitude of 39°5' N. Assume the earth is a sphere with radius 4,000 miles.