GO COUGARS!

Homework Questions

Change each degree measure to radian measure in terms of π. Do not use your calculator and reduce your answer.

1. 140° $\frac{7\pi}{9}$
2. 860° $\frac{43\pi}{9}$
3. 1200° $\frac{20\pi}{3}$
4. −300° $-\frac{5\pi}{3}$
5. −405° $-\frac{9\pi}{4}$
6. 280° $\frac{14\pi}{9}$

Change each radian measure to degree measure without using a calculator.

7. $\frac{-3\pi}{5}$ $-108°$
8. $\frac{11\pi}{3}$ $660°$
9. $\frac{2\pi}{7}$ $\frac{360°}{7}$
10. $-4\frac{1}{2}\pi$ $-810°$
11. $\frac{-12\pi}{5}$ $-432°$
12. $\frac{8\pi}{5}$ $288°$
13. $\frac{3\pi}{5}$ $108°$
14. $\frac{\pi}{5}$ $36°$
15. $-\frac{\pi}{3}$ $-60°$

Find the exact value of each trigonometric function.

1. tan (510°) $-\frac{1}{\sqrt{3}}$
2. csc $\frac{11\pi}{4}$ $\sqrt{2}$
3. sin (−90°) -1
4. cot 1665° 1
5. cot 30° $\sqrt{3}$
6. tan 315° -1
7. csc $\frac{\pi}{4}$ $\sqrt{2}$
8. tan $\frac{4\pi}{3}$ $\sqrt{3}$
9. cot 1110° $\sqrt{3}$
10. cos 270° 0
11. csc (−45°) $-\sqrt{2}$
12. sin 30° $\frac{1}{2}$
13. sec 2π 1
14. cot (−30°) $-\sqrt{3}$
15. csc 3π und

4.4 extra problems

Find the value of Θ in radians and in degrees.

1. $\sin\theta = 0.4565$ 27.16° 154.84°
2. $\cos\theta = 0.8746$ .47 2.67 29°, 331°, .51, 5.78
3. $\cot\theta = 2.3545$ 23.01° 203.01°
4. $\sec\theta = 1.3746$ .40 3.54 43.32°, 316.68°, .76, 5.53