

Trigonometry

Quiz 2

Aug 31, 2012

Covering A1 - A2

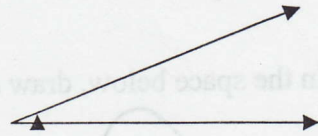
19 possible

19. Name Key

3π 1. Give the exact value of the number of radians in one and one half a circles. (not multiple guess, just place the answer in the blank!)

A 2. An angle θ in standard position whose measure is 43,216° has its terminal side in which quadrant?
 A. I B. II C. III D. IV

E 3. Consider the angle shown at the right. It's measure in radians would be closest to:
 A. $\frac{2\pi}{3}$ B. $\frac{\pi}{2}$ C. $\frac{\pi}{3}$ D. $\frac{\pi}{4}$ E. $\frac{\pi}{6}$



A 4. Consider an angle θ in standard position whose measure is 150°. What is the measure of this angle in radians?
 A. $\frac{5\pi}{6}$ B. $\frac{7\pi}{6}$ C. $\frac{\pi}{2}$ D. $\frac{\pi}{6}$ E. $\frac{4\pi}{5}$ F. None of these is correct

B 5. Find the radian measure of the central angle of a circle whose radius is 20 cm that intercepts an arc of length 16 cm.
 A. 1.25 B. 0.8 C. $\frac{\pi}{6}$ D. 0.16 E. 20

D 6. Which of the following angles, if drawn in standard position, would be coterminal with an angle whose measure is $\frac{5\pi}{6}$:
 A. $\frac{\pi}{6}$ B. $-\frac{5\pi}{6}$ C. $\frac{13\pi}{6}$ D. $\frac{17\pi}{6}$ E. none of these values are correct.

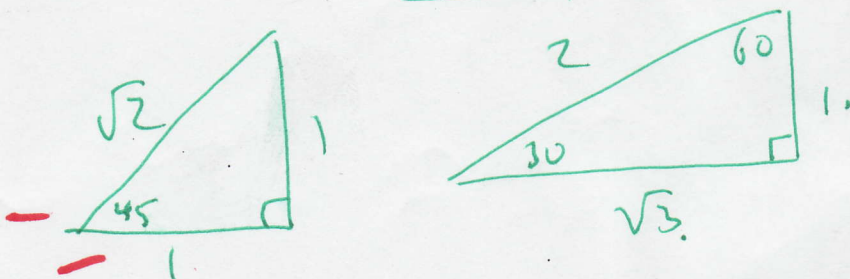
A 7. What is the supplement of an angle whose measure is 23°?
 A. 157° B. 147° C. 167° D. 137° E. None of these is correct

√2 8. Give the exact value of $\sec(45^\circ)$ (it's not multiple guess, just put your ans in the blank)

$\frac{1}{\frac{1}{\sqrt{3}}} = \frac{\sqrt{3}}{1} = \sqrt{3}$
√3 9. Give the exact value of $\tan(\frac{\pi}{6})$

√3 10. Give the exact value of $\tan(\frac{\pi}{3})$

$\frac{4\pi}{7}$ 11. Give the exact value of the supplement of an angle whose measure is $\frac{3\pi}{7}$.



$\frac{7\pi}{12}$ (12) Convert the measure of the following angle to radians, give the exact value: 105°

$\cos \theta$ (13) Which trigonometric function is the reciprocal of $\sec \theta$

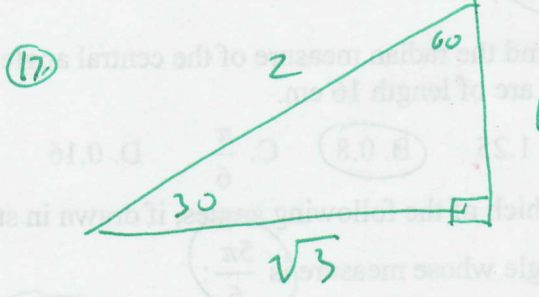
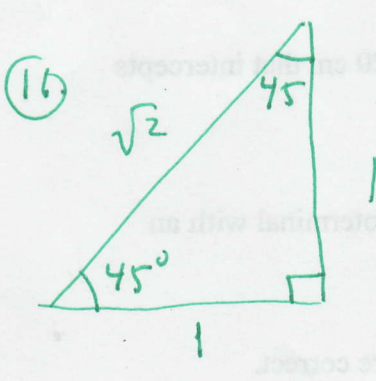
57° (14) What is the complement of an angle whose measure is 33°

57.3° or $\frac{157}{5}$ (15) How many degrees are in one radian? You may either give the exact value or a decimal approximation, but try to get the answer correct.

(16) (17): In the space below, draw and correctly label the $45^\circ 45^\circ 90^\circ$ and $30^\circ 60^\circ 90^\circ$ triangles.

18. Suppose Earth is 8000 miles in diameter and city A is $17^\circ 22' 32''$ and city B is $23^\circ 39' 49''$ north of the equator. Suppose city B is directly north of city A. How many miles north of A is city B? Use the space below.

Please be certain you answer question 19. I will deduct a point if you fail to answer it AND I'll deduct a point if I simply can't read the answer.



439 miles 18.

