

Trig-Precalculus 4.1-4.5 Review (+ 4.7)

ALL SUPPORTING WORK MUST BE SHOWN TO RECEIVE FULL CREDIT

Give the exact answer without the use of a calculator.

1) $\cos 540^\circ$

5) $\tan \frac{7\pi}{4}$

2) $\sec 240^\circ$

6) $\sin (-270^\circ)$

3) $\csc 60^\circ$

7) $\cos \frac{\pi}{4}$

4) $\cot 120^\circ$

8) $\sin \frac{5\pi}{6}$

Draw & label
ref Δ's!

Convert the angle to degrees, minutes, and seconds.

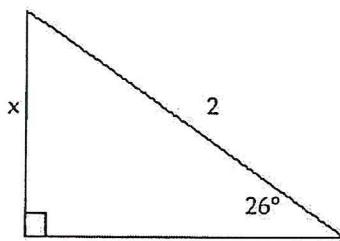
9) 230.14°

Assume that θ is an acute angle in a right triangle satisfying the given conditions. Evaluate the indicated trigonometric function.

10) $\sin \theta = \frac{7}{8}$; $\cot \theta$

Solve for x. Round your answer to 2 decimal places.

11)



Use the given information to find the arc length.

12) $r = 10 \text{ ft}$, $\theta = 39^\circ$; find s

Convert the radian measure to degree measure.

13) $\frac{5\pi}{4}$

Solve the equation.

15) Solve $\tan \theta = \sqrt{3}$ for θ , where $0^\circ \leq \theta \leq 90^\circ$.

Convert to radians.

14) 215°

Find the exact value of the real number y.

21) $y = \cos^{-1} \left(\frac{\sqrt{3}}{2} \right)$

22) $y = \sin^{-1} (1)$

23) $y = \tan^{-1} (-\sqrt{3})$

Graph each of the following. Show b/p work. Make a table. Show all required work for each type of fn.

16. $y = -2 \sin \frac{\pi}{2} \theta$

17. $y = 3 \cos 6\theta$

18. $y = 4 \tan \frac{\theta}{3}$

19. $y = \frac{1}{2} \cot 2\theta$

20. Solve each eqn a) $\sin \theta = -\frac{1}{2}$ for $\pi < \theta < \frac{3\pi}{2}$

b) $\cot \theta = -1$ for $\frac{\pi}{2} < \theta < \pi$