

Pre-Calculus Practice Test Chapter 5 Part 1

Draw each angle below.

1) -60°

2) 405°

Convert from degrees to radians. Leave π in your answer.

3) 42°

4) 54°

Convert from radians to degrees.

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

6) $\frac{3\pi}{5}$

Find the exact value of each the six trig functions given a point.

7) $(-2, 3)$

8) $(1, 6)$

Find the exact value of each expression.

9) $5\sin\left(\frac{3\pi}{4}\right) + 4\cos\left(\frac{\pi}{3}\right)$

10) $3\tan\left(\frac{11\pi}{6}\right)\cot\left(\frac{3\pi}{4}\right)$

11) $3\sin\left(\frac{-\pi}{6}\right) + 2\cos\left(\frac{2\pi}{3}\right)$

12) $3\cos\left(\frac{-\pi}{3}\right)\sec\left(\frac{\pi}{4}\right)$

Use a calculator to find an approximation of the following.

13) $\sin(78^\circ)$

14) $\cos(25^\circ)$

15) $\csc(22^\circ)$

16) $\cot(57^\circ)$

17) $\sin(\pi)$

18) $\tan(4)$

Find the exact value of the following.

19) $\sin\left(\frac{17\pi}{4}\right)$

20) $\cos(495^\circ)$

Find the exact value of each of the remaining trig functions of θ .

$$21) \sin \theta = \frac{1}{4}, 90^\circ < \theta < 180^\circ$$

$$22) \tan \theta = -\frac{5}{7}, 270^\circ < \theta < 360^\circ$$

Graph one cycle of the following trig function.

$$23) f(x) = 3\sin 2\left(x - \frac{\pi}{4}\right) + 1$$

$$24) f(x) = 2\cos \frac{\pi}{2}(x - 2) + 3$$

$$25) f(x) = \tan 3x + 1$$