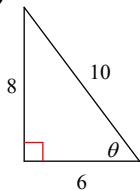


## Practice Test 4.1-4.5 - NO CALC

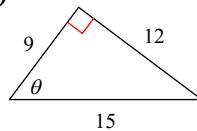
Date \_\_\_\_\_ Period \_\_\_\_\_ Score \_\_\_\_\_

**Find the value of the trig function indicated.**

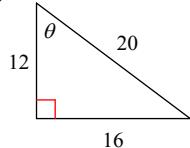
1)  $\cos \theta$



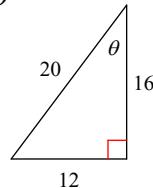
2)  $\tan \theta$



3)  $\sin \theta$



4)  $\csc \theta$

**In each triangle ABC, angle C is a right angle. Find the value of the trig function indicated.**

5) Find  $\sec A$  if  $b = 12$ ,  $c = 15$ ,  $a = 9$

6) Find  $\csc A$  if  $b = 7$ ,  $c = 25$ ,  $a = 24$

**Find the value of the trig function indicated.**

7) Find  $\sec \theta$  if  $\tan \theta = \frac{8}{15}$

8) Find  $\tan \theta$  if  $\csc \theta = \frac{5}{3}$

**Find the exact value of each trigonometric function.**

9)  $\sin 30^\circ$

10)  $\sin 300^\circ$

11)  $\cos 300^\circ$

12)  $\cos 315^\circ$

13)  $\tan 90^\circ$

14)  $\tan 300^\circ$

15)  $\sin \frac{2\pi}{3}$

16)  $\sin \frac{\pi}{6}$

17)  $\cos \frac{11\pi}{6}$

18)  $\cos \frac{3\pi}{4}$

19)  $\tan \frac{3\pi}{2}$

20)  $\tan \frac{\pi}{3}$

21)  $\sec 315^\circ$

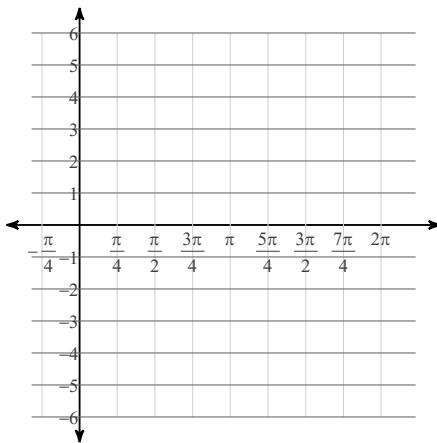
22)  $\csc 0^\circ$

23)  $\cot \frac{11\pi}{6}$

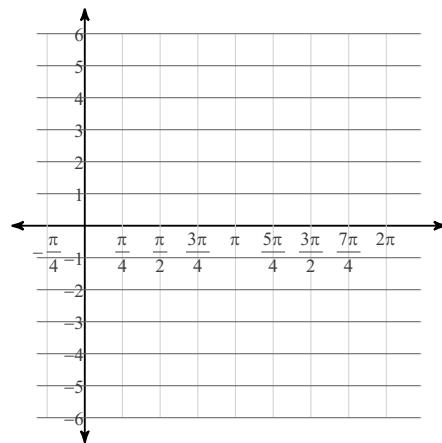
24)  $\csc \pi$

**Find the amplitude, the period in radians, the phase shift in radians, and the vertical shift. Then sketch the graph using radians.**

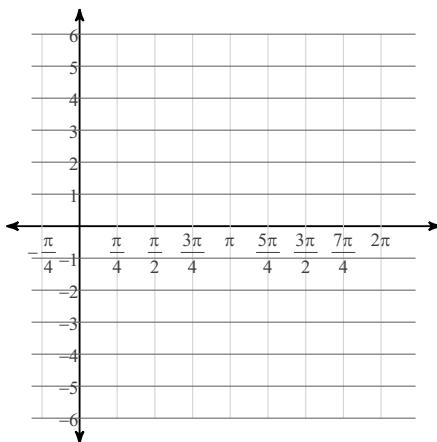
25)  $y = 4\sin 3\theta$



26)  $y = \frac{1}{2} \cdot \cos \left(3\theta + \frac{\pi}{3}\right)$



27)  $y = \frac{1}{2} \cdot \cos \left(2\theta - \frac{2\pi}{3}\right) + 2$



# Answers to Practice Test 4.1-4.5 - NO CALC (ID: 1)

1)  $\frac{3}{5}$

2)  $\frac{4}{3}$

3)  $\frac{4}{5}$

4)  $\frac{5}{3}$

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

6)  $\frac{25}{24}$

7)  $\frac{17}{15}$

8)  $\frac{3}{4}$

9)  $\frac{1}{2}$

10)  $-\frac{\sqrt{3}}{2}$

11)  $\frac{1}{2}$

12)  $\frac{\sqrt{2}}{2}$

13) Undefined

14)  $-\sqrt{3}$

15)  $\frac{\sqrt{3}}{2}$

16)  $\frac{1}{2}$

17)  $\frac{\sqrt{3}}{2}$

18)  $-\frac{\sqrt{2}}{2}$

19) Undefined

20)  $\sqrt{3}$

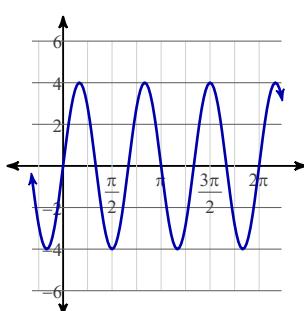
21)  $\sqrt{2}$

22) Undefined

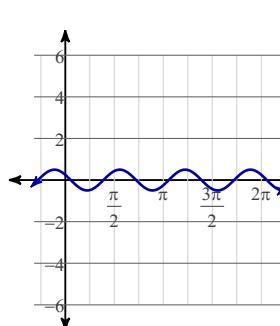
23)  $-\sqrt{3}$

24) Undefined

25)

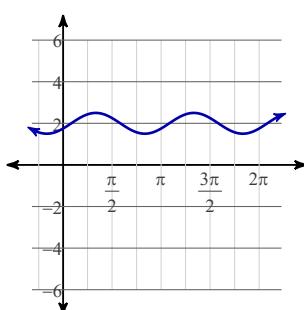


Amplitude: 4  
 Period:  $\frac{2\pi}{3}$   
 Phase shift: None  
 Vert. shift: None



Amplitude:  $\frac{1}{2}$   
 Period:  $\frac{2\pi}{3}$   
 Phase shift: Left  $\frac{\pi}{9}$   
 Vert. shift: None

27)



Amplitude:  $\frac{1}{2}$   
 Period:  $\pi$   
 Phase shift: Right  $\frac{\pi}{3}$   
 Vert. shift: Up 2