

Practice Test 4.1-4.4 SCI. CALC.

Date _____ Period ____ Score _____

Find the reference angle. Keep the result in the same format as the problem (deg/rad).

1) 580°

2) 510°

3) $-\frac{43\pi}{18}$

4) $-\frac{3\pi}{4}$

Convert each degree measure into radians.

5) 460°

6) 30°

Convert each radian measure into degrees.

7) $\frac{2\pi}{3}$

8) $-\frac{11\pi}{6}$

Find the value of each. Round your answers to the nearest ten-thousandth.

9) $\sin 51^\circ$

10) $\tan 80^\circ$

11) $\csc 80^\circ$

12) $\sec 65^\circ$

13) $\sec 80^\circ$

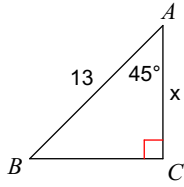
14) $\csc 80^\circ$

15) $\sec \frac{5\pi}{12}$

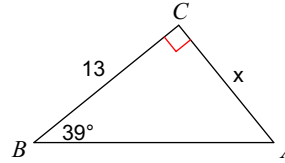
16) $\csc \frac{\pi}{6}$

Find the measure of each side indicated. Round to the nearest tenth.

17)

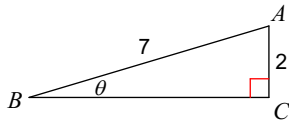


18)

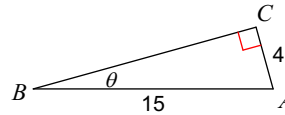


Find the measure of each angle indicated. Round to the nearest tenth.

19)

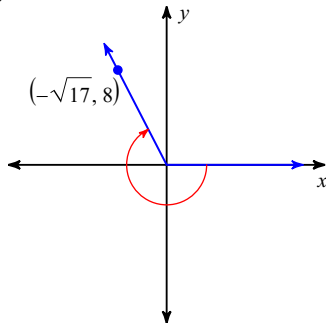


20)

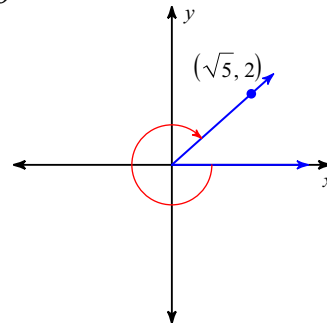


Use the given point on the terminal side of angle θ to find the value of the trigonometric function indicated.

21) $\sin \theta$



22) $\sin \theta$



23) $\sec \theta; (9, -\sqrt{19})$

24) $\csc \theta; (-\sqrt{7}, -3)$

Find the exact values of the five trigonometric ratios not given.

25) $\tan \theta = -5$ and $\cos \theta > 0$

26) $\cot \theta = -\sqrt{2}$ and $\cos \theta < 0$

Answers to Practice Test 4.1-4.4 SCI. CALC. (ID: 1)

1) 40°

2) 30°

3) $\frac{7\pi}{18}$

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

5) $\frac{23\pi}{9}$

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

7) 120°

8) -330°

9) 0.7771

10) 5.6713

11) 1.0154

12) 2.3662

13) 5.7588

14) 1.0154

15) 3.8637

16) 2.0000

17) 9.2

18) 10.5

19) 16.6°

20) 15.5°

21) $\frac{8}{9}$

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

23) $\frac{10}{9}$

24) $-\frac{4}{3}$

25) $\sin \theta = -\frac{5\sqrt{26}}{26}, \cos \theta = \frac{\sqrt{26}}{26}$

26) $\sin \theta = \frac{\sqrt{3}}{3}, \cos \theta = -\frac{\sqrt{6}}{3}, \tan \theta = -\frac{\sqrt{2}}{2}$

$\csc \theta = -\frac{\sqrt{26}}{5}, \sec \theta = \sqrt{26}, \cot \theta = -\frac{1}{5}$

$\csc \theta = \sqrt{3}, \sec \theta = -\frac{\sqrt{6}}{2}$