

## Practice Test 4.1-4.5 SCI. CALC.

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

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

1)  $-520^\circ$

2)  $-200^\circ$

3)  $-\frac{25\pi}{12}$

4)  $\frac{25\pi}{9}$

**Convert each degree measure into radians.**

5)  $150^\circ$

6)  $-780^\circ$

**Convert each radian measure into degrees.**

7)  $\frac{23\pi}{18}$

8)  $-\frac{13\pi}{4}$

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

9)  $\cos 40^\circ$

10)  $\cos 25^\circ$

11)  $\cot 60^\circ$

12)  $\sec 70^\circ$

13)  $\cot 70^\circ$

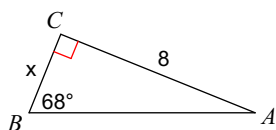
14)  $\cot 49^\circ$

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

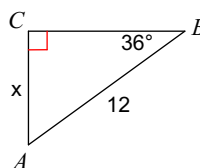
16)  $\csc \frac{\pi}{3}$

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

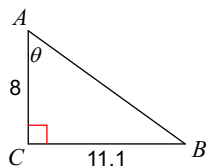
17)



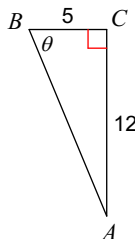
18)

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

19)

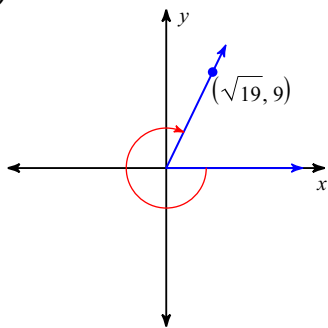


20)

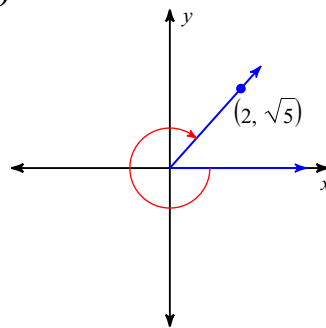


Use the given point on the terminal side of angle  $\theta$  to find the value of the trigonometric function indicated.

21)  $\csc \theta$



22)  $\sin \theta$



23)  $\csc \theta; (5, -12)$

24)  $\sec \theta; (16, -13)$

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

25)  $\cot \theta = -\sqrt{3}$  and  $\sin \theta < 0$

26)  $\sec \theta = -\sqrt{2}$  and  $\sin \theta > 0$

## Answers to Practice Test 4.1-4.5 SCI. CALC. (ID: 1)

- |  |                          |   |                             |
|--|--------------------------|---|-----------------------------|
| 1) $20^\circ$  | 2) $20^\circ$            | 3) $\frac{\pi}{12}$   | 4) $\frac{2\pi}{9}$         |
| 5) $\frac{5\pi}{6}$  | 6) $-\frac{13\pi}{3}$    | 7) $230^\circ$  | 8) $-585^\circ$             |
| 9) 0.7660  | 10) 0.9063               | 11) 0.5774  | 12) 2.9238                  |
| 13) 0.3640   | 14) 0.8693               | 15) 1.4142  | 16) 1.1547                  |
| 17) 3.2  | 18) 7.1                  | 19) $54.2^\circ$  | 20) $67.4^\circ$            |
| 21) $\frac{10}{9}$   | 22) $\frac{\sqrt{5}}{3}$ | 23) $-\frac{13}{12}$  | 24) $\frac{5\sqrt{17}}{16}$ |
| 25) $\sin \theta = -\frac{1}{2}, \cos \theta = \frac{\sqrt{3}}{2}, \tan \theta = -\frac{\sqrt{3}}{3}$<br>$\csc \theta = -2, \sec \theta = \frac{2\sqrt{3}}{3}$ |                          | 26) $\sin \theta = \frac{\sqrt{2}}{2}, \cos \theta = -\frac{\sqrt{2}}{2}, \tan \theta = -1$<br>$\csc \theta = \sqrt{2}, \cot \theta = -1$ |                             |