

4.1-4.3 Review

Name: _____

(1) Simplify $\sqrt{45}$

(2) Simplify $\sqrt{96}$

(3) Simplify $\frac{6}{\sqrt{28}}$

(4) If $\csc \theta = \frac{25}{24}$ and $\tan \theta < 0$, find $\cos \theta$.

(5) If $\tan \theta = \frac{3}{4}$ and $\sec \theta < 0$, find $\csc \theta$.

Give exact values:

(6) $\sec \frac{5}{3}\pi =$

(11) $\cot \frac{2}{3}\pi =$

(7) $\csc \frac{3}{4}\pi =$

(12) $\sin \left(\frac{32}{3}\pi\right) =$

(8) $\cot 24\pi =$

(13) $\cos \left(\frac{7}{2}\pi\right) =$

(9) $\csc \left(\frac{7}{6}\pi + 13\pi\right) =$

(14) $\tan 191\pi =$

(10) $\sec \left(\frac{31}{6}\pi\right) =$

(15) $\sin 450^\circ =$

$$\textcircled{1} \quad 3\sqrt{5}$$

$$\textcircled{2} \quad 4\sqrt{6}$$

$$\textcircled{3} \quad \frac{6}{2\sqrt{7}} \cdot \frac{\sqrt{7}}{\sqrt{7}} = \frac{6\sqrt{7}}{14} = \frac{3\sqrt{7}}{7}$$

$$\textcircled{4} \quad a=7, \cos \theta = -\frac{7}{25}$$

$$\textcircled{5} \quad h=5, \sin \theta = -\frac{3}{5}, \csc \theta = -\frac{5}{3}$$

$$\textcircled{6} \quad 2$$

$$\textcircled{11} \quad -\frac{\sqrt{3}}{3}$$

$$\textcircled{7} \quad \cancel{-}\sqrt{2}$$

$$\textcircled{12} \quad \frac{\sqrt{3}}{2}$$

$$\textcircled{8} \quad \frac{1}{0} = \text{undefined}$$

$$\textcircled{13} \quad 0$$

$$\textcircled{9} \quad 2$$

$$\textcircled{14} \quad \frac{0}{-1} = 0$$

$$\textcircled{10} \quad -\frac{2}{\sqrt{3}}$$

$$\textcircled{15} \quad 1$$