

Finding Trig Functions of Any Angle 2

Date _____ Period _____

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

1) $\sin \theta = -\frac{2\sqrt{6}}{5}$ and $\cos \theta > 0$

2) $\csc \theta = -\frac{5}{3}$ and $\cos \theta > 0$

3) $\tan \theta = \frac{\sqrt{2}}{2}$ and $\cos \theta > 0$

4) $\tan \theta = \frac{3}{4}$ and $\cos \theta < 0$

5) $\cos \theta = \frac{21}{29}$ and $\sin \theta < 0$

6) $\sin \theta = -\frac{8}{17}$ and $\cos \theta < 0$

7) $\sec \theta = \frac{13}{7}$ and $\sin \theta < 0$

8) $\csc \theta = \frac{9\sqrt{5}}{20}$ and $\cos \theta < 0$

Answers to Finding Trig Functions of Any Angle 2

$$1) \cos \theta = \frac{1}{5}, \tan \theta = -2\sqrt{6}$$

$$\csc \theta = -\frac{5\sqrt{6}}{12}, \sec \theta = 5, \cot \theta = -\frac{\sqrt{6}}{12}$$

$$3) \sin \theta = \frac{\sqrt{3}}{3}, \cos \theta = \frac{\sqrt{6}}{3}$$

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

$$5) \sin \theta = -\frac{20}{29}, \tan \theta = -\frac{20}{21}$$

$$\csc \theta = -\frac{29}{20}, \sec \theta = \frac{29}{21}, \cot \theta = -\frac{21}{20}$$

$$7) \sin \theta = -\frac{2\sqrt{30}}{13}, \cos \theta = \frac{7}{13}, \tan \theta = -\frac{2\sqrt{30}}{7}$$

$$\csc \theta = -\frac{13\sqrt{30}}{60}, \cot \theta = -\frac{7\sqrt{30}}{60}$$

$$2) \sin \theta = -\frac{3}{5}, \cos \theta = \frac{4}{5}, \tan \theta = -\frac{3}{4}$$

$$\sec \theta = \frac{5}{4}, \cot \theta = -\frac{4}{3}$$

$$4) \sin \theta = -\frac{3}{5}, \cos \theta = -\frac{4}{5}$$

$$\csc \theta = -\frac{5}{3}, \sec \theta = -\frac{5}{4}, \cot \theta = \frac{4}{3}$$

$$6) \cos \theta = -\frac{15}{17}, \tan \theta = \frac{8}{15}$$

$$\csc \theta = -\frac{17}{8}, \sec \theta = -\frac{17}{15}, \cot \theta = \frac{15}{8}$$

$$8) \sin \theta = \frac{4\sqrt{5}}{9}, \cos \theta = -\frac{1}{9}, \tan \theta = -4\sqrt{5}$$

$$\sec \theta = -9, \cot \theta = -\frac{\sqrt{5}}{20}$$