



Precalculus: Trigonometric Functions

Name _____ Date _____

Calculate the sine of an angle given the cosine and the quadrant or vice-versa

(1) $\cos \theta = \frac{8}{17}, \theta \in \text{IV}$

(2) $\cos \theta = -\frac{12}{37}, \theta \in \text{II}$

(3) $\sin \theta = -\frac{12}{13}, \theta \in \text{III}$

(4) $\cos \theta = \frac{5}{13}, \theta \in \text{I}$

(5) $\sin \theta = \frac{28}{53}, \theta \in \text{II}$

(6) $\cos \theta = -\frac{4}{5}, \theta \in \text{II}$

(7) $\sin \theta = \frac{15}{17}, \theta \in \text{I}$

(8) $\cos \theta = \frac{4}{5}, \theta \in \text{IV}$

(9) $\sin \theta = \frac{4}{5}, \theta \in \text{I}$

(10) $\sin \theta = -\frac{63}{65}, \theta \in \text{III}$

(11) $\cos \theta = \frac{13}{85}, \theta \in \text{I}$

(12) $\cos \theta = \frac{35}{37}, \theta \in \text{I}$



Answers

Calculate the sine of an angle given the cosine and the quadrant or vice-versa

$$(1) \quad \cos \theta = \frac{8}{17}, \theta \in \text{IV}$$

$$\sin \theta = -\frac{15}{17}$$

$$(3) \quad \sin \theta = -\frac{12}{13}, \theta \in \text{III}$$

$$\cos \theta = -\frac{5}{13}$$

$$(5) \quad \sin \theta = \frac{28}{53}, \theta \in \text{II}$$

$$\cos \theta = -\frac{45}{53}$$

$$(7) \quad \sin \theta = \frac{15}{17}, \theta \in \text{I}$$

$$\cos \theta = \frac{8}{17}$$

$$(9) \quad \sin \theta = \frac{4}{5}, \theta \in \text{I}$$

$$\cos \theta = \frac{3}{5}$$

$$(11) \quad \cos \theta = \frac{13}{85}, \theta \in \text{I}$$

$$\sin \theta = \frac{84}{85}$$

$$(2) \quad \cos \theta = -\frac{12}{37}, \theta \in \text{II}$$

$$\sin \theta = \frac{35}{37}$$

$$(4) \quad \cos \theta = \frac{5}{13}, \theta \in \text{I}$$

$$\sin \theta = \frac{12}{13}$$

$$(6) \quad \cos \theta = -\frac{4}{5}, \theta \in \text{II}$$

$$\sin \theta = \frac{3}{5}$$

$$(8) \quad \cos \theta = \frac{4}{5}, \theta \in \text{IV}$$

$$\sin \theta = -\frac{3}{5}$$

$$(10) \quad \sin \theta = -\frac{63}{65}, \theta \in \text{III}$$

$$\cos \theta = -\frac{16}{65}$$

$$(12) \quad \cos \theta = \frac{35}{37}, \theta \in \text{I}$$

$$\sin \theta = \frac{12}{37}$$