Precalculus: Trigonometric Functions

Name _____ **Date** _____

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

(1) $\sin\theta = \frac{56}{65},\ \theta \in \text{II}$

(2) $\sin\theta = \frac{3}{5},\ \theta \in \text{II}$

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

(4) $\cos\theta = -\frac{3}{5},\ \theta \in \text{III}$

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

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

(7) $\cos\theta = \frac{7}{25},\ \theta \in \text{I}$

(8) $\sin\theta = -\frac{15}{17},\ \theta \in \text{IV}$

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

(10) $\cos\theta = -\frac{9}{41},\ \theta \in \text{II}$

(11) $\cos\theta = \frac{11}{61},\ \theta \in \text{I}$

(12) $\cos\theta = \frac{20}{29},\ \theta \in \text{IV}$

Answers

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

(1) $\sin\theta = \frac{56}{65},\ \theta \in \text{II}$

$\cos\theta = -\frac{33}{65}$

(2) $\sin\theta = \frac{3}{5},\ \theta \in \text{II}$

$\cos\theta = -\frac{4}{5}$

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

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

(4) $\cos\theta = -\frac{3}{5},\ \theta \in \text{III}$

$\sin\theta = -\frac{4}{5}$

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

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

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

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

(7) $\cos\theta = \frac{7}{25},\ \theta \in \text{I}$

$\sin\theta = \frac{24}{25}$

(8) $\sin\theta = -\frac{15}{17},\ \theta \in \text{IV}$

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

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

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

(10) $\cos\theta = -\frac{9}{41},\ \theta \in \text{II}$

$\sin\theta = \frac{40}{41}$

(11) $\cos\theta = \frac{11}{61},\ \theta \in \text{I}$

$\sin\theta = \frac{60}{61}$

(12) $\cos\theta = \frac{20}{29},\ \theta \in \text{IV}$

$\sin\theta = -\frac{21}{29}$