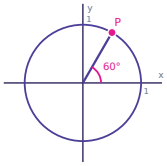
Trig Functions on the Unit Circle · 1

Find the point P where the terminal side of θ = 60° meets the unit circle.



Trig Functions on the Unit Circle · 2

Is tan(100°) positive or negative?

Trig Functions on the Unit Circle · 3

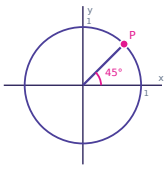
Find the exact value of sin(135°).

Trig Functions on the Unit Circle · 4

sin θ > 0 and tan θ > 0. In which quadrant does θ lie?

Trig Functions on the Unit Circle · 5

Find the point P where the terminal side of θ = 45° meets the unit circle.



Trig Functions on the Unit Circle · 6

Is tan(240°) positive or negative?

Trig Functions on the Unit Circle · 7

sin θ < 0 and cos θ > 0. In which quadrant does θ lie?

Trig Functions on the Unit Circle · 8

Is sin(160°) positive or negative?

Trig Functions on the Unit Circle · 2

ANSWER

negative

Trig Functions on the Unit Circle · 1

ANSWER

$$\left(\frac{1}{2}, \frac{\sqrt{3}}{2}\right)$$

Trig Functions on the Unit Circle · 4

ANSWER

I

Trig Functions on the Unit Circle · 3

ANSWER

$$\frac{\sqrt{2}}{2}$$

Trig Functions on the Unit Circle · 6

ANSWER

positive

Trig Functions on the Unit Circle · 5

ANSWER

$$\left(\frac{\sqrt{2}}{2}, \frac{\sqrt{2}}{2}\right)$$

Trig Functions on the Unit Circle · 8

ANSWER

positive

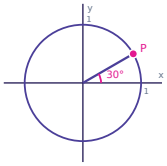
Trig Functions on the Unit Circle · 7

ANSWER

IV

Trig Functions on the Unit Circle · 9

Find the point P where the terminal side of θ = 30° meets the unit circle.



Trig Functions on the Unit Circle · 10

Is tan(160°) positive or negative?

Trig Functions on the Unit Circle · 11

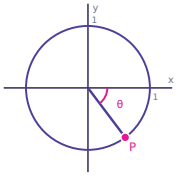
cos θ < 0 and tan θ < 0. In which quadrant does θ lie?

Trig Functions on the Unit Circle · 12

θ is in quadrant III and its reference angle is 60°. Find the exact value of cos θ.

Trig Functions on the Unit Circle · 13

The terminal side of θ meets the unit circle at $P\left(\frac{3}{5}, -\frac{4}{5}\right)$. Find sin θ.

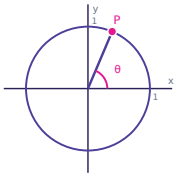


Trig Functions on the Unit Circle · 14

Find the exact value of cos(30°).

Trig Functions on the Unit Circle · 15

The terminal side of θ meets the unit circle at $P\left(\frac{5}{13}, \frac{12}{13}\right)$. Find sin θ.



Trig Functions on the Unit Circle · 16

cos θ > 0 and tan θ > 0. In which quadrant does θ lie?

Trig Functions on the Unit Circle · 10

ANSWER

negative

Trig Functions on the Unit Circle · 9

ANSWER

$$\left(\frac{\sqrt{3}}{2}, \frac{1}{2}\right)$$

Trig Functions on the Unit Circle · 12

ANSWER

$$\frac{1}{-2}$$

Trig Functions on the Unit Circle · 11

ANSWER

II

Trig Functions on the Unit Circle · 14

ANSWER

$$\frac{\sqrt{3}}{2}$$

Trig Functions on the Unit Circle · 13

ANSWER

$$\frac{4}{-5}$$

Trig Functions on the Unit Circle · 16

ANSWER

I

Trig Functions on the Unit Circle · 15

ANSWER

$$\frac{12}{13}$$

Trig Functions on the Unit Circle · 17

Is tan(330°) positive or negative?

Trig Functions on the Unit Circle · 18

sin θ > 0 and cos θ < 0. In which quadrant does θ lie?

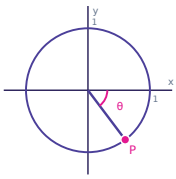
Trig Functions on the Unit Circle · 19

θ is in quadrant II and its reference angle is 60°. Find the exact value of cos θ.

Trig Functions on the Unit Circle · 20

The terminal side of θ meets the unit circle at $P(\frac{3}{5}, -\frac{4}{5})$.

Find tan θ.



Trig Functions on the Unit Circle · 21

Find the exact value of cos(150°).

Trig Functions on the Unit Circle · 22

θ is in quadrant II and its reference angle is 30°. Find the exact value of cos θ.

Trig Functions on the Unit Circle · 23

Find the exact value of sin(330°).

Trig Functions on the Unit Circle · 24

Is tan(150°) positive or negative?

Trig Functions on the Unit Circle · 18

ANSWER

II

Trig Functions on the Unit Circle · 17

ANSWER

negative

Trig Functions on the Unit Circle · 20

ANSWER

$$\frac{4}{-3}$$

Trig Functions on the Unit Circle · 19

ANSWER

$$\frac{1}{-2}$$

Trig Functions on the Unit Circle · 22

ANSWER

$$\frac{\sqrt{3}}{-2}$$

Trig Functions on the Unit Circle · 21

ANSWER

$$\frac{\sqrt{3}}{-2}$$

Trig Functions on the Unit Circle · 24

ANSWER

negative

Trig Functions on the Unit Circle · 23

ANSWER

$$\frac{1}{-2}$$