

Determine exact trigonometric ratios for special angles

- 1** Acronym for trigonometry ratios

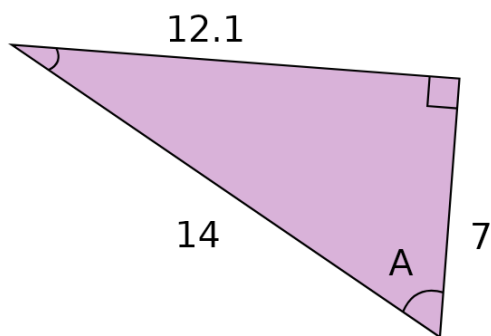
A
Sumotada

B
Sohcahtoa

C
Sotosoto

D
Serasera

- 3** Solve for the trigonometric ratio in fraction form

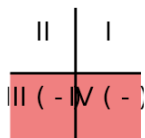


A $\sin(A) = \frac{12.1}{14}$

B $\sin(A) = \frac{14}{12.1}$

C $\sin(A) = 7 \times 12.1$

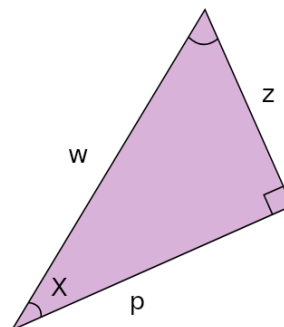
- 5** Which trig ratio will be negative in these quadrants?



A $\cos(\alpha)$

B $\sin(\alpha)$

- 2** What would side z over p be called with respect to angle 'X'?



A $\frac{\text{hypotenuse}}{\text{adjacent}}$

B $\frac{\text{adjacent}}{\text{hypotenuse}}$

C $\frac{\text{hypotenuse}}{\text{opposite}}$

D $\frac{\text{opposite}}{\text{hypotenuse}}$

E $\frac{\text{opposite}}{\text{adjacent}}$

F $\frac{\text{adjacent}}{\text{opposite}}$

- 4** Solve for the trigonometry ratio given the values

$$\text{opp} = 3.4$$

$$\text{hyp} = 5.2$$

$$\text{adj} = 4$$

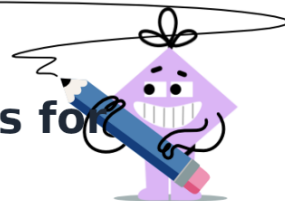
$$\cos(\alpha) =$$

A $\cos(\alpha) = 0.77$

B $\cos(\alpha) = 1.08$

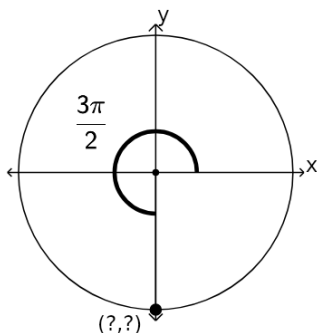
C $\cos(\alpha) = 0.45$

D $\cos(\alpha) = 14.29$



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- 6 What are the coordinates of the unit circle point at $3\pi/2$ radians



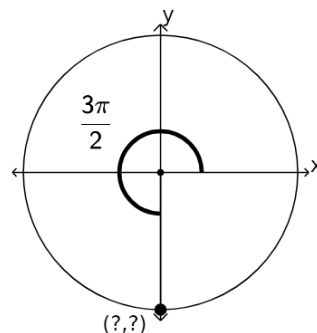
A

$$\left(\sin\left(\frac{3\pi}{2}\right), \cos\left(\frac{3\pi}{2}\right)\right)$$

B

$$\left(\cos\left(\frac{3\pi}{2}\right), \sin\left(\frac{3\pi}{2}\right)\right)$$

- 7 What are the coordinates of the unit circle point at $3\pi/2$ radians



A

$$\left(\sin\left(\frac{3\pi}{2}\right), \cos\left(\frac{3\pi}{2}\right)\right)$$

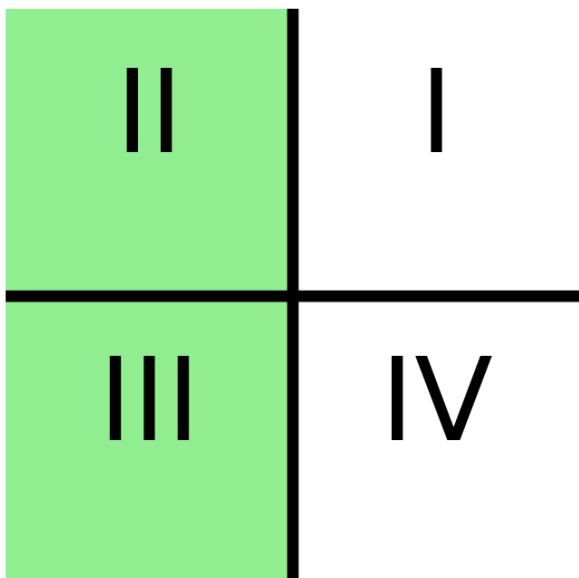
B

$$\left(\cos\left(\frac{3\pi}{2}\right), \sin\left(\frac{3\pi}{2}\right)\right)$$

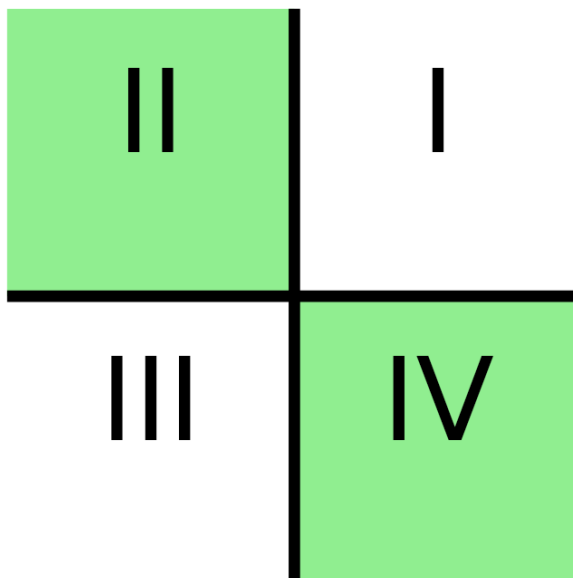
- 8 In which quadrants would this trig ratio have this sign?

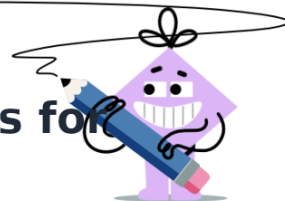
$$\cos(\beta) \rightarrow \text{negative}$$

A



B





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Which trig ratio will be positive in these quadrants?

I, II

A

$$\sin(\gamma)$$

B

$$\cos(\gamma)$$

10

Which trig ratio and sign would be correct for this angle?

 225°

A

 $\tan \rightarrow \text{positive}$

B

 $\tan \rightarrow \text{negative}$ **11**

Which trig ratio and sign would be correct for this angle?

 $\frac{4\pi}{3} \text{ rad}$

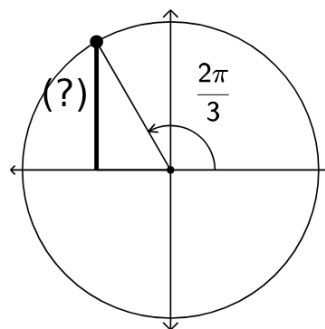
A

 $\cos \rightarrow \text{negative}$

B

 $\cos \rightarrow \text{positive}$ **12**

What is the Y dimension for the unit circle point at $2\pi/3$ radians?



A

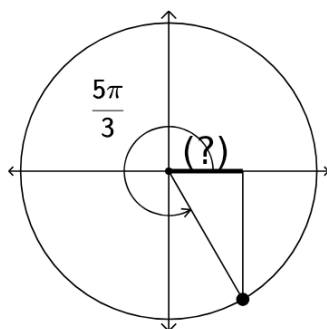
$$\frac{\sqrt{2}}{2}$$

B

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

13

What calculation gives the X dimension for the unit circle point at $5\pi/3$ radians?



A

$$\cos\left(\frac{5\pi}{3}\right) = \frac{1}{2}$$

B

$$\sin\left(\frac{5\pi}{3}\right) = -\frac{\sqrt{3}}{2}$$