mobius

Trigonometry, Unit Circle Pythagorean Identity - Cos/Sin to Identity (Degrees, Squared Notation)

1

What does Pythagoras tell us about the X dimension of this triangle?

A
$$(\cos(\theta))^2 = 1 - (\sin(\theta))^2$$

B
$$(\cos(\theta))^2 = 1 + (\sin(\theta))^2$$

2

What does Pythagoras tell us about the Y dimension of this triangle?

A
$$(\sin(\gamma))^2 = 1 + (\cos(\gamma))^2$$

B
$$(\sin(\gamma))^2 = 1 - (\cos(\gamma))^2$$

3

What does Pythagoras tell us about the Y dimension of this triangle?

A
$$(\sin(\beta))^2 = 1 - (\cos(\beta))^2$$

B
$$(\sin(\beta))^2 = 1 + (\cos(\beta))^2$$

4

What does Pythagoras tell us about the X dimension of this triangle?

A
$$\cos(\beta) = \sqrt{1 - (\sin(\beta))^2}$$

B
$$\cos(\beta) = \sqrt{(\sin(\beta))^2 + 1}$$

5

What does Pythagoras tell us about the X dimension of this triangle?

A
$$\cos(\theta) = \sqrt{(\sin(\theta))^2 + 1}$$

B
$$\cos(\theta) = \sqrt{1 - (\sin(\theta))^2}$$

6

What does Pythagoras tell us about the Y dimension of this triangle?

A
$$\sin(\theta) = \sqrt{(\cos(\theta))^2 + 1}$$

B
$$\sin(\theta) = \sqrt{1 - (\cos(\theta))^2}$$

7

What does Pythagoras tell us about the X dimension of this triangle?

A
$$(\cos(\beta))^2 = 1 - (\sin(\beta))^2$$

B
$$(\cos(\beta))^2 = 1 + (\sin(\beta))^2$$

8

What does Pythagoras tell us about the X dimension of this triangle?

A
$$\cos(\alpha) = \sqrt{1 - (\sin(\alpha))^2}$$

B
$$\cos(\alpha) = \sqrt{(\sin(\alpha))^2 + 1}$$