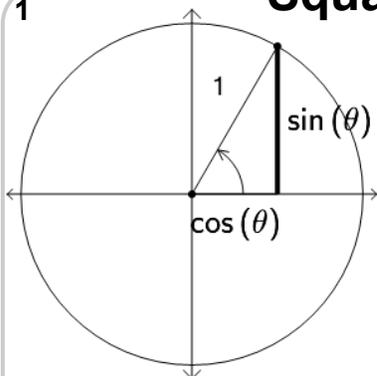# mobius

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

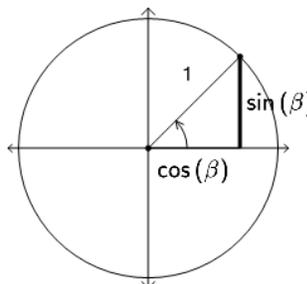**1**

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

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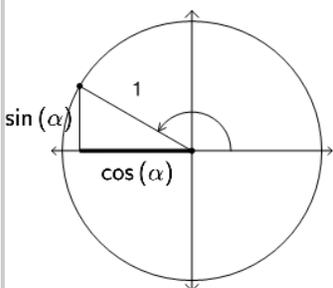
A
$$(\sin(\theta))^2 = 1 - (\cos(\theta))^2$$

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

2

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

1 $\sin(\beta)$ $\cos(\beta)$

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

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

3
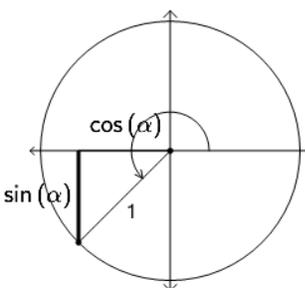
What does Pythagoras tell us about the X dimension of this triangle?

$\sin(\alpha)$ 1 $\cos(\alpha)$

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

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

4
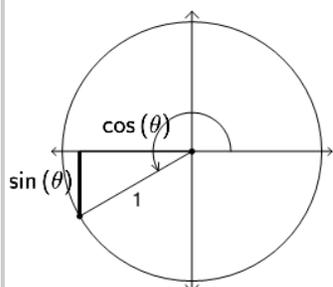
What does Pythagoras tell us about the Y dimension of this triangle?

$\cos(\alpha)$ $\sin(\alpha)$ 1

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

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

5

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

$\cos(\theta)$ $\sin(\theta)$ 1

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

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

6

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

1 $\sin(\gamma)$ $\cos(\gamma)$

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

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

7

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

$\cos(\beta)$ 1 $\sin(\beta)$

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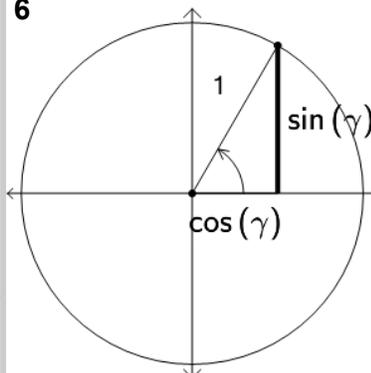
B
$$\sin(\beta) = \sqrt{(\cos(\beta))^2 + 1}$$

8

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

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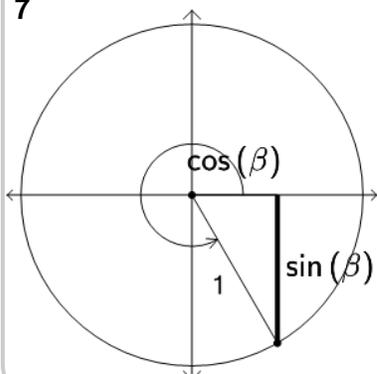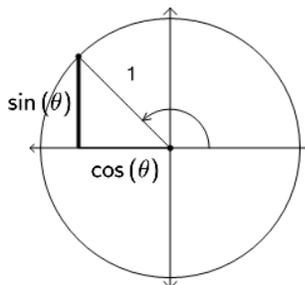
A
$$(\sin(\theta))^2 = 1 - (\cos(\theta))^2$$

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