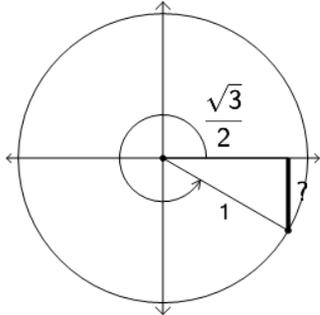


Trigonometry, Unit Circle Pythagorean Identity - Dimension to Cos/Sin Value Identity, Degrees

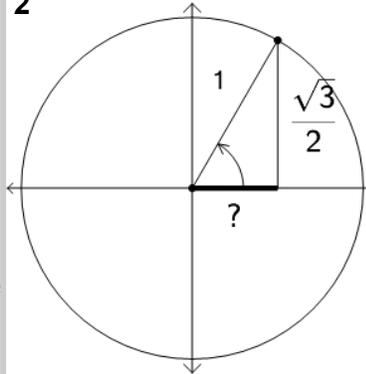
1



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

A	B
$\sin^2(330^\circ) = 1 - \left(\frac{\sqrt{3}}{2}\right)^2$	$\sin^2(330^\circ) = 1 + \left(\frac{\sqrt{3}}{2}\right)^2$

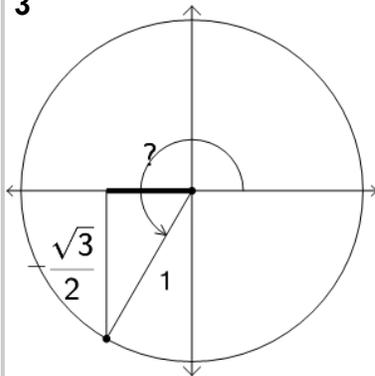
2



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

A	B
$\cos(60^\circ) = \sqrt{1 - \left(\frac{\sqrt{3}}{2}\right)^2}$	$\cos(60^\circ) = \sqrt{\left(\frac{\sqrt{3}}{2}\right)^2 + 1}$

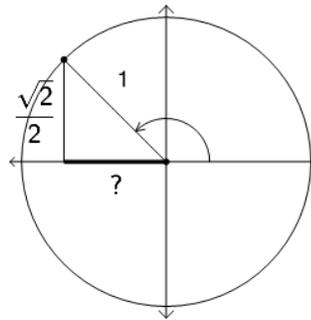
3



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

A	B
$\cos(240^\circ) = \sqrt{1 - \left(-\frac{\sqrt{3}}{2}\right)^2}$	$\cos(240^\circ) = \sqrt{\left(-\frac{\sqrt{3}}{2}\right)^2 + 1}$

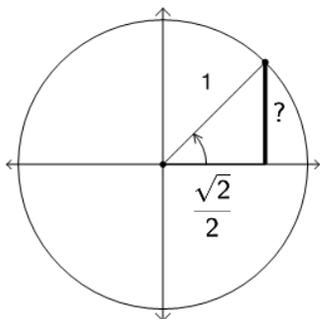
4



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

A	B
$\cos^2(135^\circ) = 1 + \left(\frac{\sqrt{2}}{2}\right)^2$	$\cos^2(135^\circ) = 1 - \left(\frac{\sqrt{2}}{2}\right)^2$

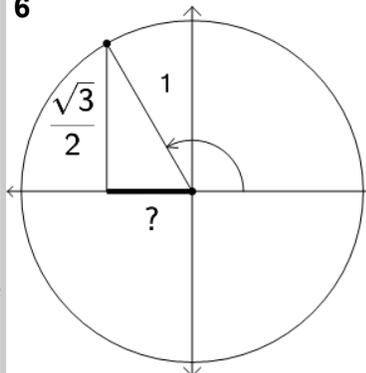
5



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

A	B
$\sin^2(45^\circ) = 1 + \left(\frac{\sqrt{2}}{2}\right)^2$	$\sin^2(45^\circ) = 1 - \left(\frac{\sqrt{2}}{2}\right)^2$

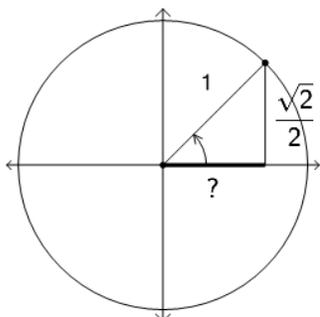
6



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

A	B
$\cos^2(120^\circ) = 1 + \left(\frac{\sqrt{3}}{2}\right)^2$	$\cos^2(120^\circ) = 1 - \left(\frac{\sqrt{3}}{2}\right)^2$

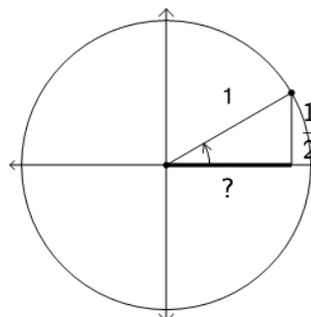
7



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

A	B
$\cos(45^\circ) = \sqrt{1 - \left(\frac{\sqrt{2}}{2}\right)^2}$	$\cos(45^\circ) = \sqrt{\left(\frac{\sqrt{2}}{2}\right)^2 + 1}$

8



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

A	B
$\cos^2(30^\circ) = 1 + \left(\frac{1}{2}\right)^2$	$\cos^2(30^\circ) = 1 - \left(\frac{1}{2}\right)^2$