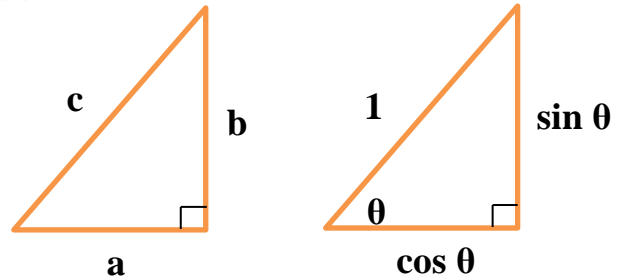


Unit 5 - Lesson 4: Guided Notes

Use the Pythagorean Theorem with Trig Functions: $a^2 + b^2 = c^2$

$$\sin^2 \theta + \cos^2 \theta = 1$$

Now take the above equation $\sin^2 \theta + \cos^2 \theta = 1$



1) divide all terms by $\sin^2 \theta$

2) divide all terms by $\cos^2 \theta$

Fill-in the blanks of the following with (sin , cos , tan , cot , csc , sec)

$$\sin \theta = \frac{1}{-}$$

$$\csc \theta = \frac{1}{-}$$

$$\tan \theta = -$$

$$\cos \theta = \frac{1}{-}$$

$$\sec \theta = \frac{1}{-}$$

$$\cot \theta = -$$

$$\tan \theta = \frac{1}{-}$$

$$\cot \theta = \frac{1}{-}$$

Practice Problems

1) Simplify $\tan x \cot x =$ _____

2) $\sec^2 x =$ _____

3) $\csc^2 A =$ _____

4) $\frac{\sin A}{\csc A} =$ _____

5) $\frac{\cos A}{\sec A} =$ _____

6) $\frac{\cot x}{\cos x} =$ _____