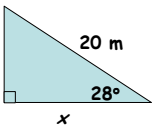
What's my Ratio?

So, if our triangle has an angle equal to 30°, the ratios will be the same as those in our triangle.

Ex. Find the value of x.



We can't solve this because we don't have the ratios for a 28° angle. Our calculator is programmed with the ratios for all angles but they are not labeled as opposite/hypotenuse or adjacent/hypotenuse or opposite/adjacent. They have special names.

The special names of the ratios:

$$\tan gent(of\ an\ angle) = \frac{opposite}{adjacent}$$

$$\sin e(of\ an\ angle) = \frac{opposite}{hypotenuse}$$

$$\cos ine(of\ an\ angle) = \frac{adjacent}{hypotenuse}$$

Its easier to remember them by using the first letters of adjacent, opposite and hypotenuse.

$$\tan(of\ an\ angle) = \frac{o}{a}$$

$$\sin(of\ an\ angle) = \frac{o}{h}$$

$$\cos(of\ an\ angle) = \frac{a}{h}$$

There is a memory tool that helps us remember this.

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