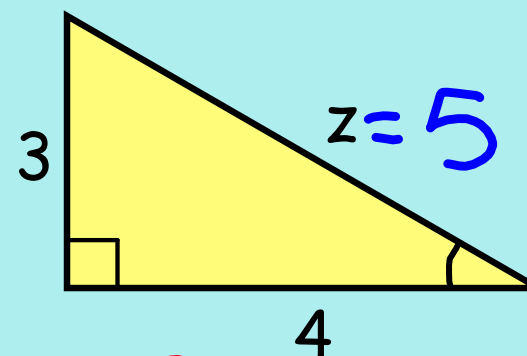
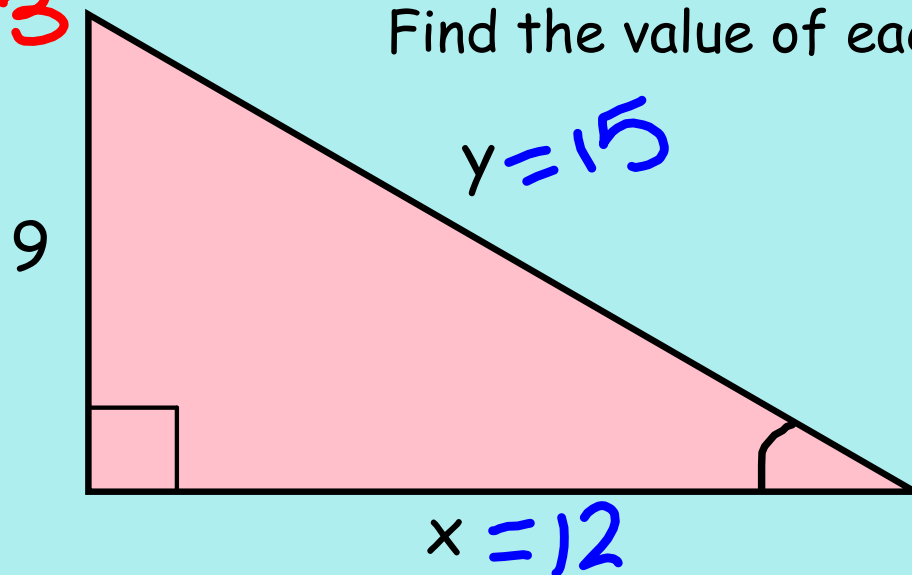


$\frac{9}{3} = 3$ 2/5/20 - Warm Up Problem

Find the value of each variable.



$$\begin{aligned} 3^2 + 4^2 &= z^2 \\ 9 + 16 &= z^2 \\ 25 &= z^2 \end{aligned}$$

Investigating Trigonometric Ratios

Trigon - latin word for triangle

metry - greek/latin word relating to measurements

Trigonometry = method for finding measurements of triangles including angles and sides

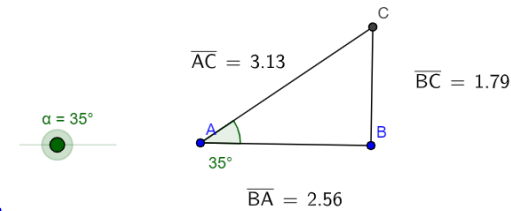
Trigonometric Ratio = A ratio of two sides of a right triangle

INVESTIGATING TRIGONOMETRIC RATIOS

Go to <https://ggbm.at/AwbdW52h>. You should see a geogebra right triangle.

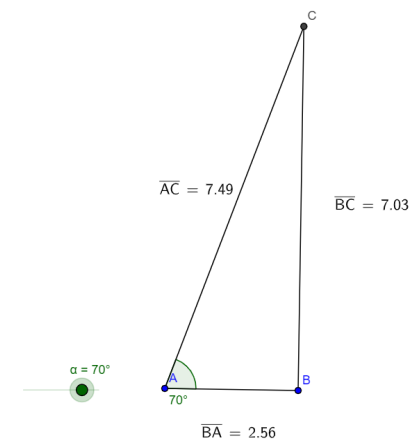
1. Set your triangle so that Angle A = 35° .
2. Change the length of the sides.
3. Complete the table for 3 different side lengths, but keep Angle A at 35° .

Angle A	Length BC	Length AC	$\frac{\text{Length BC}}{\text{Length AC}}$
35°	1.79	3.13	$\frac{1.79}{3.13} = .572$
35°			
35°			



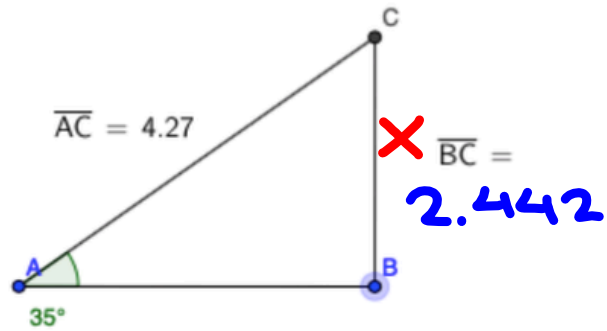
4. Set your triangle so that Angle A = 70° .
5. Change the length of the sides.
6. Complete the table for 3 different side lengths, but keep the Angle A at 70° .

Angle A	Length AB	Length AC	$\frac{\text{Length AB}}{\text{Length AC}}$
70°			.341
70°			.342
70°			



Answer each question below without using the geogebra triangle on your iPad.

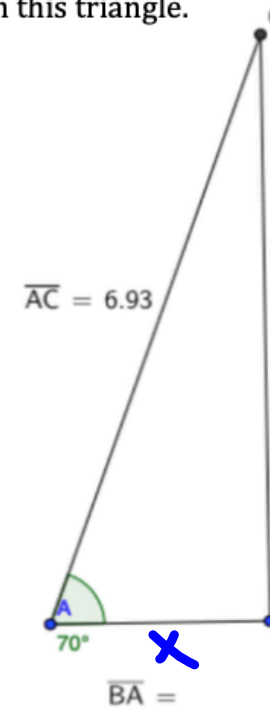
8. Find the length of BC on this triangle.



$$\frac{x}{4.27} = \frac{57}{1}$$

$$x = 2.442$$

9. Find the length of AB on this triangle.



$$\frac{x}{6.93} =$$