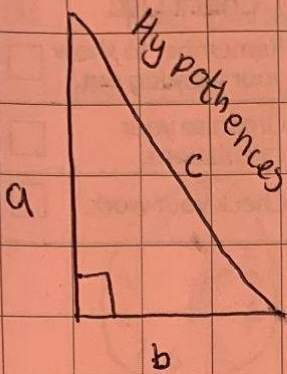


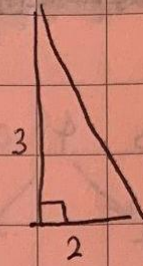
Pythagoras Theorem

07/10/22



shorter lines longest lines
 $a^2 + b^2 = c^2$

Hypothences is always the longest
 as well as opposite the right angle.



$$3^2 + 2^2 = c^2$$

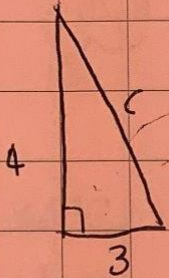
$$9 + 4 = c^2$$

$$13 = c^2$$

$$c = \sqrt{13}$$

or = 3.605
= 3.61
= 3.6

Example:



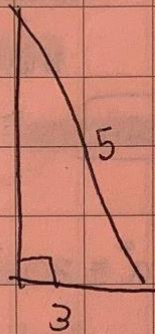
$$4^2 + 3^2 = c^2$$

$$16 + 9 = c^2$$

$$25 = c^2$$

$$c = \sqrt{25}$$

$c = 5$

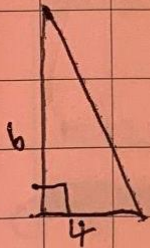


$$c^2 - a^2 = b^2$$

$$25 - 9 = b^2$$

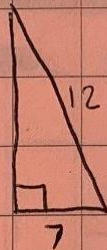
$$16 = b^2$$

$$b^2 = \sqrt{16}$$



$$36 + 16 = c^2$$

$$c^2 = \sqrt{52}$$

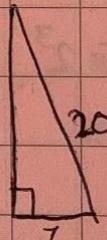


$$c^2 - b^2 = a^2$$

$$144 - 49 = a^2$$

$$95 = a^2$$

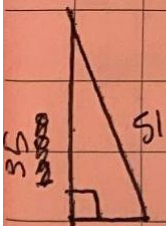
$$a^2 = \sqrt{95}$$



$$400 - 49 = b^2$$

$$351 = b^2$$

$$b^2 = 18.73$$



$$1225 - 2601 = b^2$$

$$1376 = b^2$$

$$b^2 = \sqrt{1376} = 37.09$$