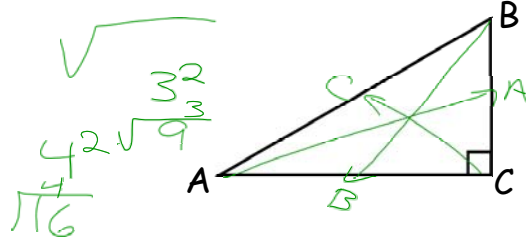


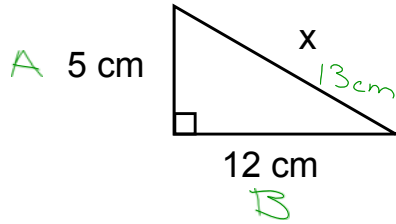
Pythegoreas Theorem

- must be a right Δ
- to find missing side when given 2 sides



$$a^2 + b^2 = c^2$$

Find side x



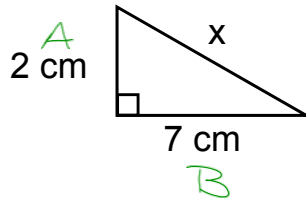
$$A^2 + B^2 = X^2$$

$$5^2 + 12^2 = X^2$$

$$25 + 144 = X^2$$

$$\sqrt{169} = X^2$$

$$X = 13$$



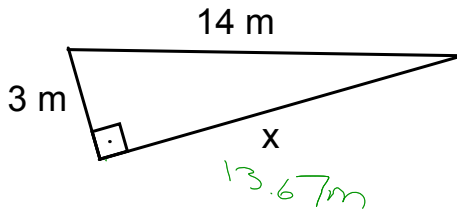
$$A^2 + B^2 = X^2$$

$$2^2 + 7^2 = X^2$$

$$4 + 49 = X^2$$

$$\sqrt{53} = X^2$$

$$X = 7.28$$



$$A^2 + B^2 = C^2$$

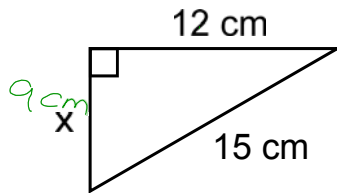
$$3^2 + X^2 = 14^2$$

$$9 + X^2 = 196$$

$$X^2 = 196 - 9$$

$$X^2 = \sqrt{187}$$

$$X = 13.67$$



$$A^2 + B^2 = C^2$$

$$X^2 + 12^2 = 15^2$$

$$X^2 + 144 = 225$$

$$X^2 = 225 - 144$$

$$X^2 = \sqrt{81}$$

$$X = 9$$