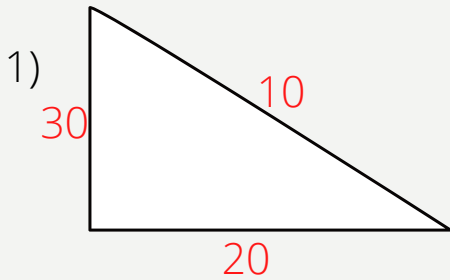


# PYTHAGOREAN THEOREM

Use the pythagorean theorem to show if the triangle is a right triangle.

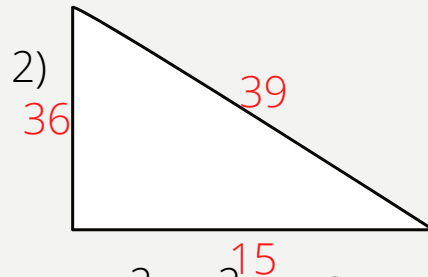


$$a^2 + b^2 = c^2$$

$$10^2 + 20^2 = 30^2$$

$$100 + 200 = 900$$

$$300 \neq 900$$



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

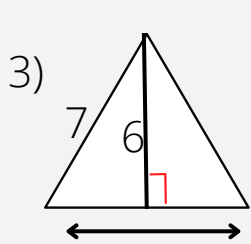
$$15^2 + 36^2 = 39^2$$

$$225 + 1296 = 1521$$

$$1521 = 1521$$

This is right angle triangle

Find X. Estimate the answer the nearest whole number.



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

$$7^2 + 6^2 = c^2$$

$$49 + 36 = c^2$$

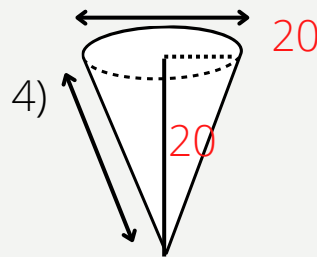
$$85 = c^2$$

$$c = 8.1$$

$$x = 2c$$

$$x = 2 \times 8.1$$

$$x = 16.2$$



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

$$20^2 + 20^2 = c^2$$

$$\left(\frac{20}{2}\right)^2 + 20^2 = c^2$$

$$10^2 + 20^2 = c^2$$

$$100 + 400 = c^2$$

$$500 = c^2$$

$$c = 22$$

