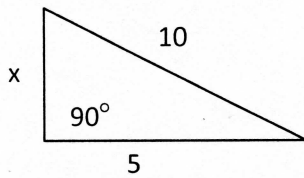


Topic 25 Pythagorean Theorem
Quiz Ver Practice

1) Find the value of x



$$5^2 + x^2 = 10^2$$

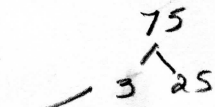
$$25 + x^2 = 100$$

$$x^2 = 75$$

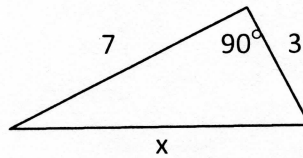
$$x = \sqrt{75}$$

$$x = \sqrt{25 \cdot 3}$$

$$x = 5\sqrt{3}$$



2) Find the value of x



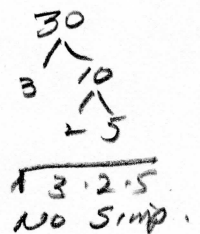
$$7^2 + 3^2 = x^2$$

$$21 + 9 = x^2$$

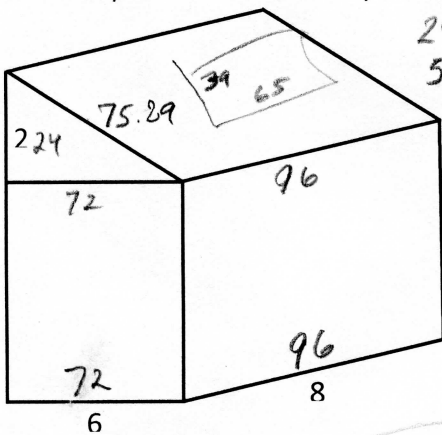
$$30 = x^2$$

$$x^2 = 30$$

$$x = \sqrt{30}$$



3) A garden shed with the given dimensions (in feet : 12 inches per foot) is built. You want to install a solar panel that is 65 inches by 39 inches on the roof. Will the panel fit? Show your calculations are proof.



$$24^2 + 72^2 = x^2$$

$$576 + 5184 = x^2$$

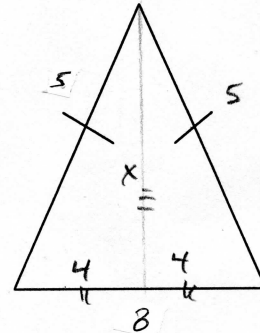
$$5760 = x^2$$

$$x = \sqrt{5760}$$

$$x = 75.89 \text{ inches}$$

There is more than enough room in fact, you could get 2 panels on the shed.

4) Find the height of the given triangle.



$$5^2 + 4^2 = x^2$$

$$25 + 16 = x^2$$

$$41 = x^2$$

$$x = \sqrt{41}$$