



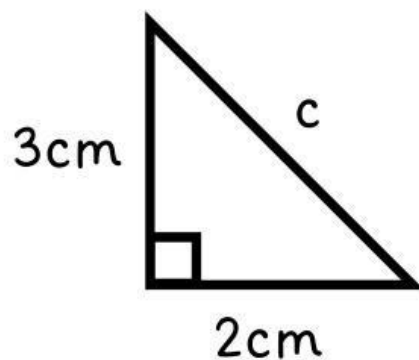
Using Pythagoras' Theorem

Name:

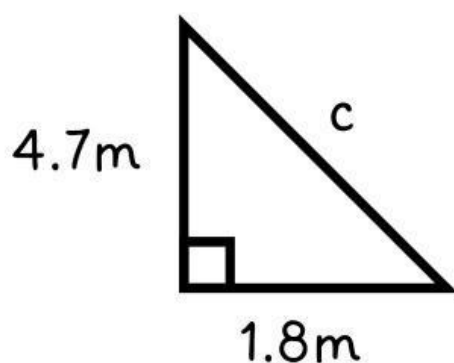
Class:

Task: Find the length of the unknown sides for each right-angled triangles below. Round all answers to 2 decimal places.

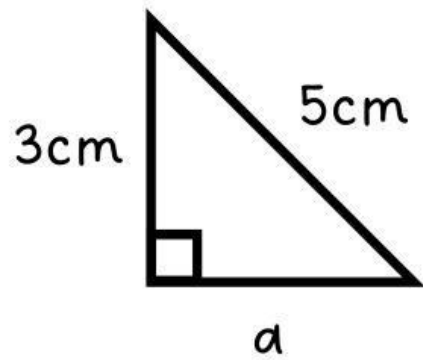
1



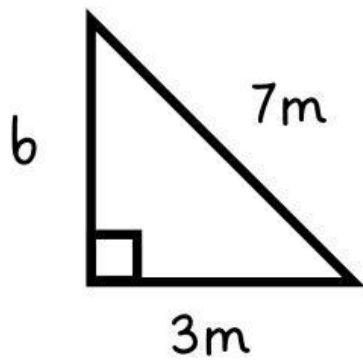
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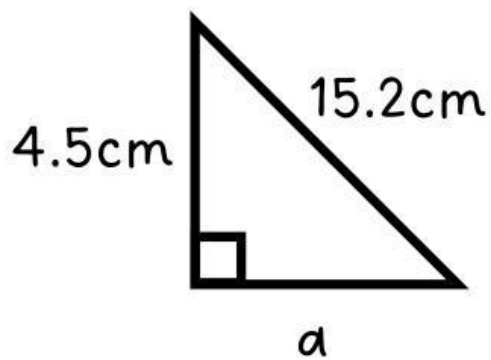
3



4



5



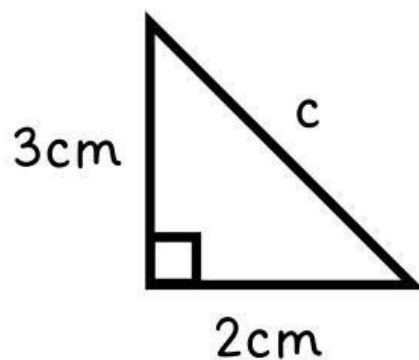
ANSWER KEY



Using Pythagoras' Theorem

Task: Find the length of the unknown sides for each right-angled triangles below. Round all answers to 2 decimal places.

1



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

$$a = 2 \text{ and } b = 3$$

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

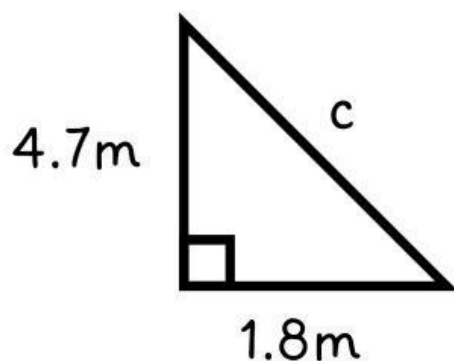
$$4 + 9 = c^2$$

$$13 = c^2$$

$$\sqrt{13} = \sqrt{c^2}$$

$$c = 3.61\text{cm}$$

2



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

$$a = 1.8 \text{ and } b = 4.7$$

$$1.8^2 + 4.7^2 = c^2$$

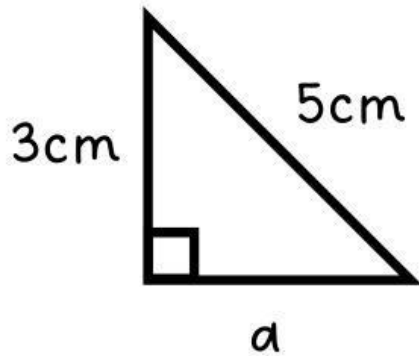
$$3.24 + 22.09 = c^2$$

$$25.33 = c^2$$

$$\sqrt{25.33} = \sqrt{c^2}$$

$$c = 5.03\text{m}$$

3



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

$$b = 3 \text{ and } c = 5$$

$$a^2 + 3^2 = 5^2$$

$$a^2 + 9 = 25$$

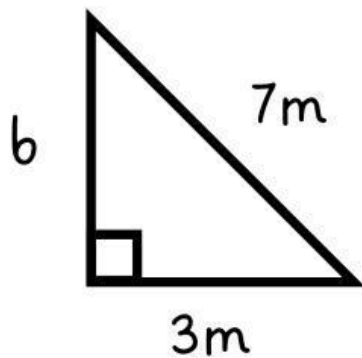
$$a^2 = 25 - 9$$

$$a^2 = 16$$

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

$$a = 4\text{cm}$$

4



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

$$a = 3 \text{ and } c = 7$$

$$3^2 + b^2 = 7^2$$

$$9 + b^2 = 49$$

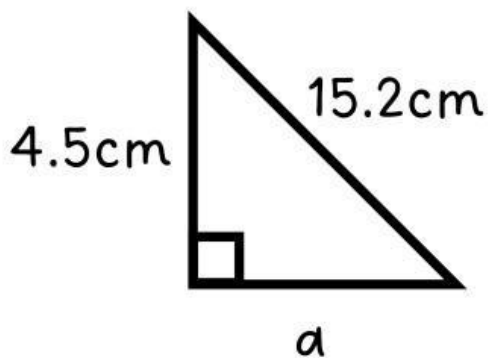
$$b^2 = 49 - 9$$

$$b^2 = 40$$

$$\sqrt{b^2} = \sqrt{40}$$

$$b = 6.32\text{m}$$

5



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

$$b = 4.5 \text{ and } c = 15.2$$

$$a^2 + 4.5^2 = 15.2^2$$

$$a^2 + 20.25 = 231.04$$

$$a^2 = 231.04 - 20.25$$

$$a^2 = 210.79$$

$$\sqrt{a^2} = \sqrt{210.79}$$

$$a = 14.52\text{cm}$$