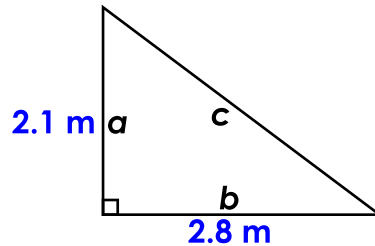


Name: _____

Pythagorean Theorem

The Pythagorean Theorem can be used to find the length of a side of a right triangle if the lengths of the other two sides are known. The formula to find the length of any side of a right triangle is $a^2 + b^2 = c^2$. The **hypotenuse** is side **c**.

example:



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

$$2.1^2 + 2.8^2 = c^2$$

$$4.41 + 7.84 = c^2$$

$$12.25 = c^2$$

$$3.5 \text{ m} = c$$

Find the length of each hypotenuse. Use a calculator to solve and round to the nearest tenth.



Preview

Please log in to download
the printable version of this worksheet.

Tell whether each set of lengths forms a right triangle. Write **RIGHT TRIANGLE** if it is, or **NO** if it is not.

a=30 cm, b=40 cm, c=50 cm

a=12.6 m, b=24.9 m, c=38.6 m

a=44.4 mm, b=33.3 mm, c=55.5 mm

a=652 km, b=577 km, c=704.3 km

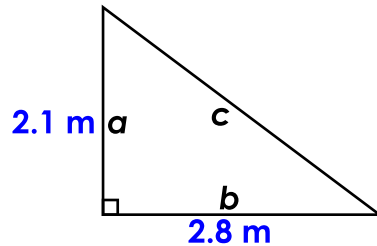
a=6.6 mm, b=8.8 mm, c=11 mm

ANSWER KEY

Pythagorean Theorem

The Pythagorean Theorem can be used to find the length of a side of a right triangle if the lengths of the other two sides are known. The formula to find the length of any side of a right triangle is $a^2 + b^2 = c^2$. The **hypotenuse** is side **c**.

example:



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

$$2.1^2 + 2.8^2 = c^2$$

$$4.41 + 7.84 = c^2$$

$$12.25 = c^2$$

$$3.5 \text{ m} = c$$

Find the length of each hypotenuse. Use a calculator to solve and round to the nearest tenth.

Preview

Please log in to download
the printable version of this worksheet.

