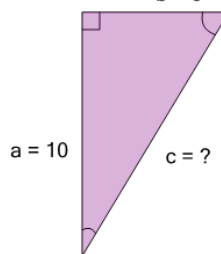# mobius

Math worksheet on *'Pythagorean Theorem - Length of Hypotenuse - Labelled Sides (Equation) (Level 2)'*. Part of a broader unit on *'Pythagoras - Intro'*
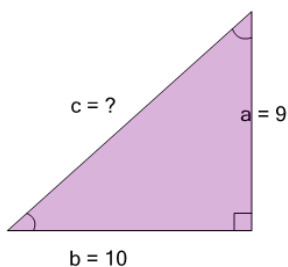
Learn online: app.mobius.academy/math/units/pythagoras_intro/

1 Find the length of the missing side as an equation based on the Pythagorean theorem:
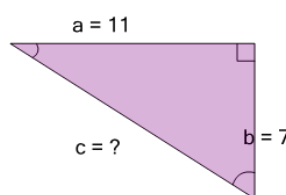$a^2 + b^2 = c^2$
$b = 6$
$a = 10$ $c = ?$

a	b
$10^2 + 6^2$	$\sqrt{10^2 + 6^2}$
c	**d**
$10^2 - 6^2$	$\sqrt{10^3 + 6^3}$

2 Find the length of the missing side as an equation based on the Pythagorean theorem:
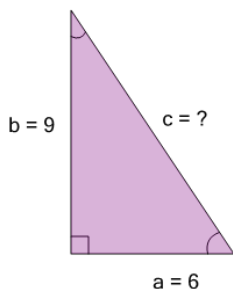$a^2 + b^2 = c^2$
$c = ?$ $a = 9$ $b = 10$

a	b
$9^2 - 10^2$	$\sqrt{9^2 + 10^2}$
c	
$\sqrt{9^2 - 10^2}$	

3 Find the length of the missing side as an equation based on the Pythagorean theorem:
$a^2 + b^2 = c^2$
$a = 11$ $c = ?$ $b = 7$

a	b
$\sqrt{11^2 + 7^2}$	$11^2 + 7^2$
c	**d**
$\sqrt{11^2 - 7^2}$	$11^2 - 7^2$

4 Find the length of the missing side as an equation based on the Pythagorean theorem:
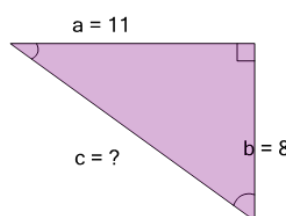$a^2 + b^2 = c^2$
$b = 9$ $c = ?$ $a = 6$

a	b
$6^2 + 9^2$	$6^2 - 9^2$
c	
$\sqrt{6^2 + 9^2}$	

5 Find the length of the missing side as an equation based on the Pythagorean theorem:
$a^2 + b^2 = c^2$
$a = 11$ $c = ?$ $b = 8$

a	b
$11^2 - 8^2$	$\sqrt{11^2 + 8^2}$
c	**d**
$11^2 + 8^2$	$\sqrt{8^2 - 11^2}$

6 Find the length of the missing side as an equation based on the Pythagorean theorem:
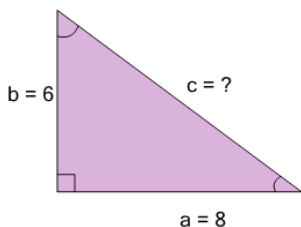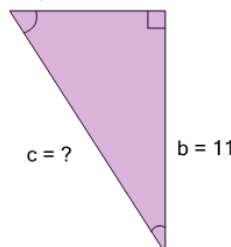$a^2 + b^2 = c^2$
$b = 6$ $c = ?$ $a = 8$

a	b
$8^2 - 6^2$	$\sqrt{8^2 - 6^2}$
c	**d**
$\sqrt{8^2 + 6^2}$	$8^2 + 6^2$

7 Find the length of the missing side as an equation based on the Pythagorean theorem:
$a^2 + b^2 = c^2$
$a = 7$
$c = ?$ $b = 11$

a	b
$7^2 - 11^2$	$\sqrt{7^2 + 11^2}$
c	
$7^2 + 11^2$	