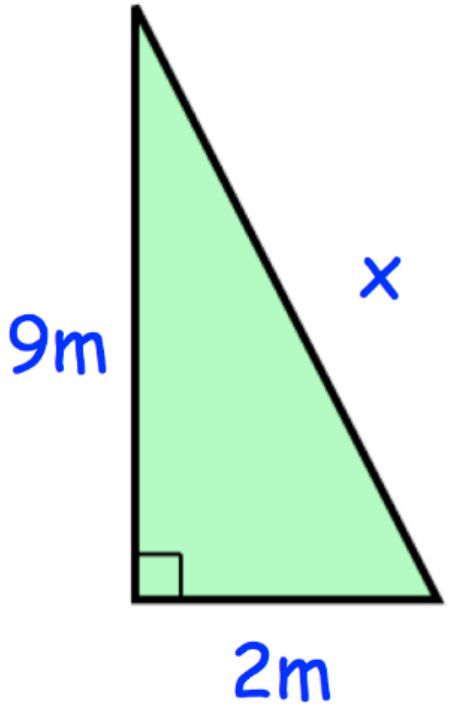
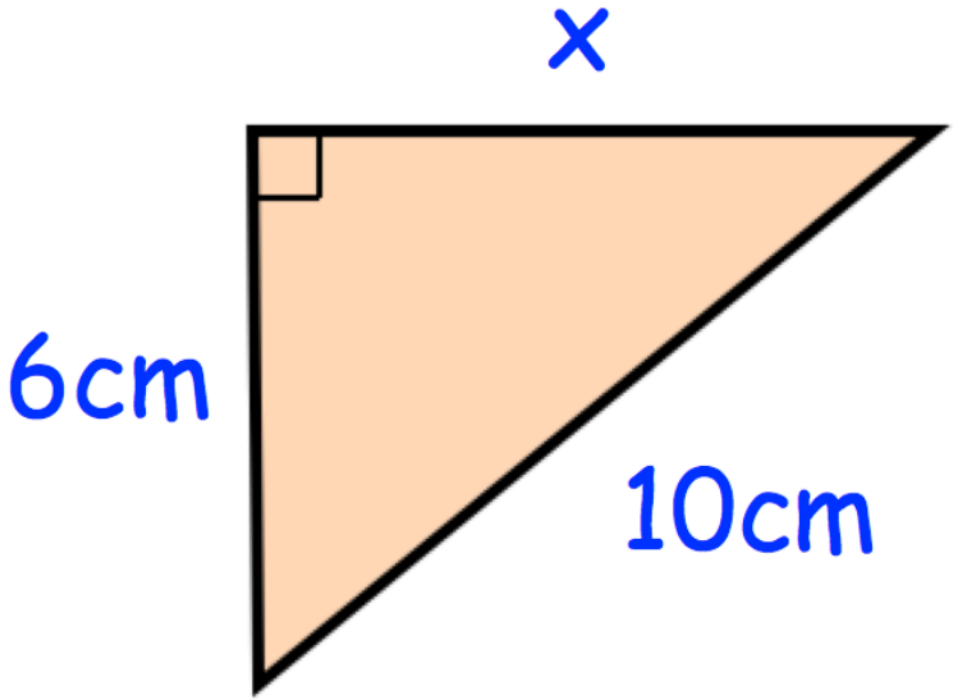
Revision

Pythagoras

Find x using the Pythagoras theorem:

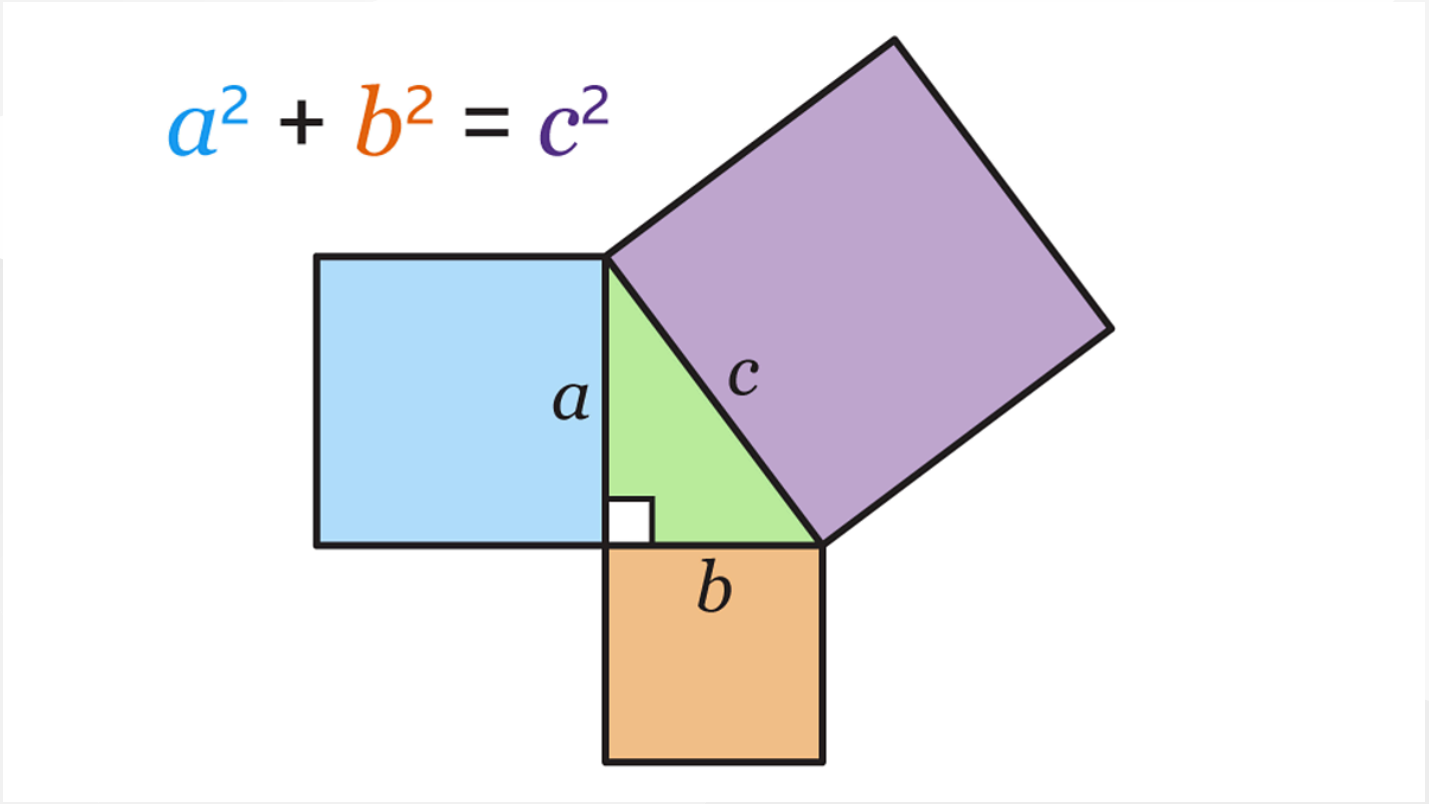


Find x using the Pythagoras theorem:



Common Mistakes

1. c^2 is not the **hypotenuse**, it is the **square**



2. Which side are you finding? Hypotenuse or short side?

Percentages

- Original amount: $600
  Final amount: $750
  Percentage change: _____
- Original amount: 120 inches
  Final amount: 105 inches
  Percentage change: _____
- Original amount: 16 ounces
  Final amount: 24 ounces
  Percentage change: _____
- Original amount: 25 minutes
  Final amount: 20 minutes
  Percentage change: _____

Common Misconceptions

- Percentage Increase vs Percentage Decrease
  - Original Amount: 100
    Final Amount: 125
    Percentage change: ____
  - Original Amount: 125
    Final Amount: 100
    Percentage change:
- Is 70% equal to 70 or 0.7?
- Is 70% the same as $\frac{1}{7}$?

Algebra

Common Mistakes

- Dropping minus signs
- Brackets, brackets and ~~brackets~~ BIDMAS
- Is x + 3 the same as 3x, 4x, 4 or none?
- Indices or coefficient: is x^2 the same as 2x?

Substituting

- Find the value of 3b + 4 when b = 10.
- Find the value of $20 - \frac{m}{5}$ when m = 35.
- Find the value of 2p(15 − r) when p = 5 and r = 6.

Expanding Brackets

1. $3(x+2)$
2. $x(x-1)$
3. $-2(3-x)$
4. $-2x(5-3x)$

Factoring

1. $4x + 6$
2. $15x + 20$
3. $9y - 12$
4. $5x + 15$