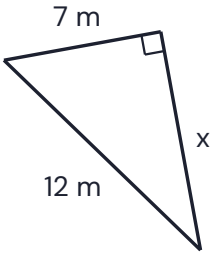
Pythagorean theorem: to the nearest tenth

Find x. Give each answer to the nearest tenth.

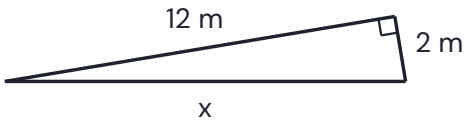
Name _____ Date _____

1.



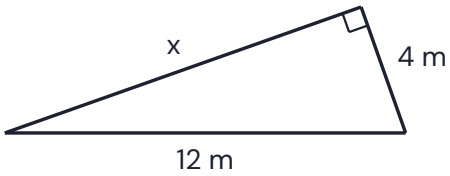
x = _____

2.



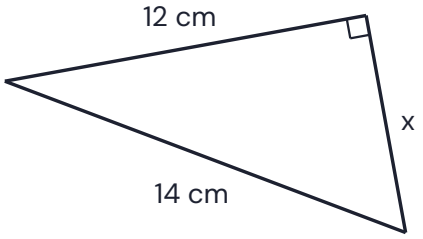
x = _____

3.



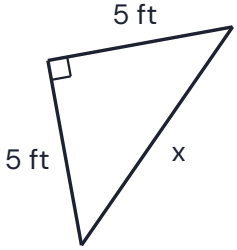
x = _____

4.



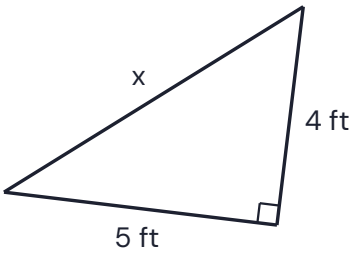
x = _____

5.



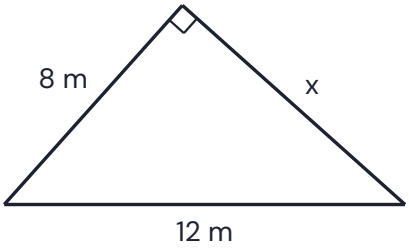
x = _____

6.



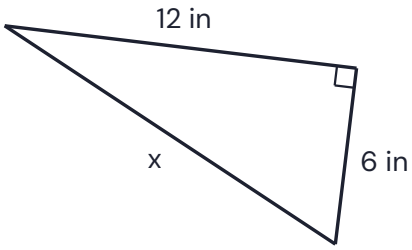
x = _____

7.



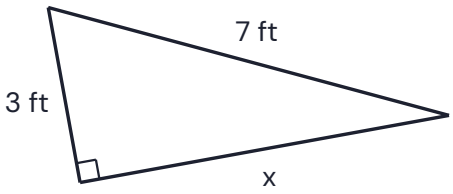
x = _____

8.



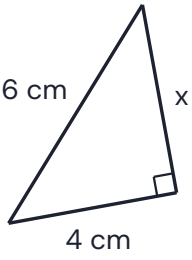
x = _____

9.



x = _____

10.



x = _____

Pythagorean theorem: to the nearest tenth: answer key

Each answer in colour, with the working before it.

1. $x^2 + 7^2 = 12^2$
   $x^2 = 144 - 49 = 95$
   $x = \sqrt{95} \approx 9.7$ m

2. $12^2 + 2^2 = x^2$
   $144 + 4 = 148$
   $x = \sqrt{148} \approx 12.2$ m

3. $x^2 + 4^2 = 12^2$
   $x^2 = 144 - 16 = 128$
   $x = \sqrt{128} \approx 11.3$ m

4. $x^2 + 12^2 = 14^2$
   $x^2 = 196 - 144 = 52$
   $x = \sqrt{52} \approx 7.2$ cm

5. $5^2 + 5^2 = x^2$
   $25 + 25 = 50$
   $x = \sqrt{50} \approx 7.1$ ft

6. $5^2 + 4^2 = x^2$
   $25 + 16 = 41$
   $x = \sqrt{41} \approx 6.4$ ft

7. $x^2 + 8^2 = 12^2$
   $x^2 = 144 - 64 = 80$
   $x = \sqrt{80} \approx 8.9$ m

8. $12^2 + 6^2 = x^2$
   $144 + 36 = 180$
   $x = \sqrt{180} \approx 13.4$ in

9. $x^2 + 3^2 = 7^2$
   $x^2 = 49 - 9 = 40$
   $x = \sqrt{40} \approx 6.3$ ft

10. $x^2 + 4^2 = 6^2$
    $x^2 = 36 - 16 = 20$
    $x = \sqrt{20} \approx 4.5$ cm