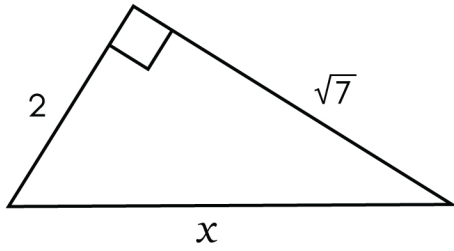


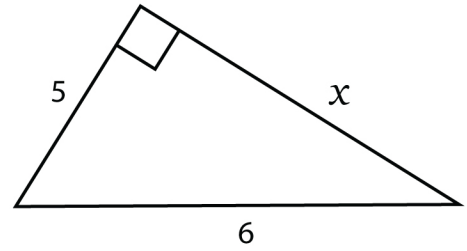
Applying the Pythagorean Theorem

Use the Pythagorean theorem to find the missing lengths of the given right triangles.

1)



2)



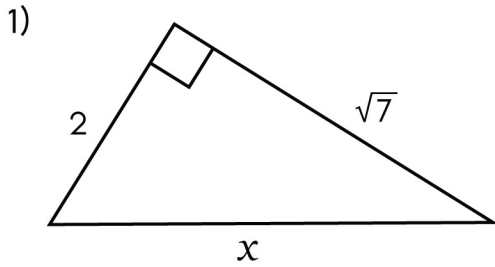
3) An isosceles triangle has congruent sides of 20 cm. The base is 10 cm. Find the height of the triangle.

4) A builder needs to add diagonal braces to a wall. The wall is 16 feet wide by 12 feet high. What is the length of each brace?

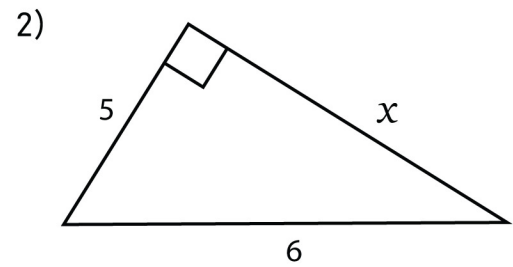
5) A ladder is leaning against the side of a 10 m long house. If the base of the ladder is 3 m away from the house how tall is the ladder?

Applying the Pythagorean Theorem

Answers



$\sqrt{11}$



$\sqrt{11}$

- 3) An isosceles triangle has congruent sides of 20 cm. The base is 10 cm. Find the height of the triangle.

$5\sqrt{15}$ cm

- 4) A builder needs to add diagonal braces to a wall. The wall is 16 feet wide by 12 feet high. What is the length of each brace?

20 feet

- 5) A ladder is leaning against the side of a 10 m long house. If the base of the ladder is 3 m away from the house how tall is the ladder?

$\sqrt{109}$ m