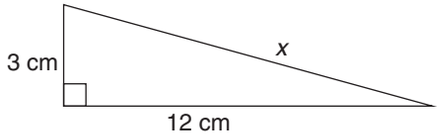
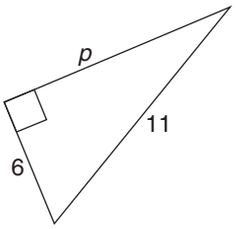
Check Up

1. Use the Pythagorean theorem to determine the unknown side lengths of the following triangles. Express your answer to the nearest tenth of a unit.

a.



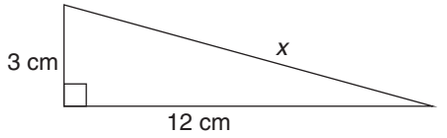
b.



☑ Compare your answers.

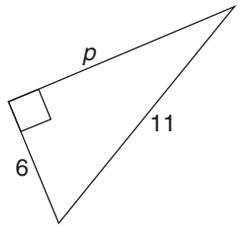
1. Use the Pythagorean theorem to determine the unknown side lengths of the following triangles. Express your answer to the nearest tenth of a unit.

a.



$$a^2 + b^2 = c^2$$
$$(3\text{ cm})^2 + (12\text{ cm})^2 = x^2$$
$$9\text{ cm}^2 + 144\text{ cm}^2 = x^2$$
$$153\text{ cm}^2 = x^2$$
$$\sqrt{153\text{ cm}^2} = \sqrt{x^2}$$
$$12.369\ldots = x$$
$$12.4\text{ cm} \doteq x$$

b.



$$a^2 + b^2 = c^2$$
$$6^2 + p^2 = 11^2$$
$$36 + p^2 = 121$$
$$36 + p^2 - 36 = 121 - 36$$
$$p^2 = 85$$
$$\sqrt{p^2} = \sqrt{85}$$
$$p = 9.219\ldots$$
$$p \doteq 9.2$$