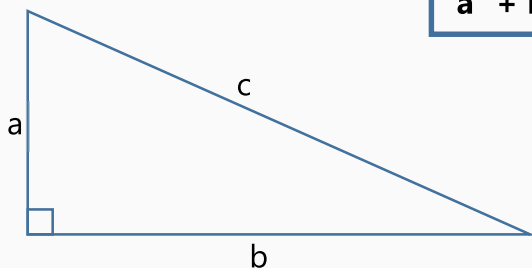


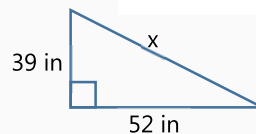
Name _____ Date _____

The Pythagorean Theorem

$$a^2 + b^2 = c^2$$



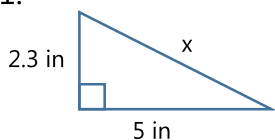
Example:



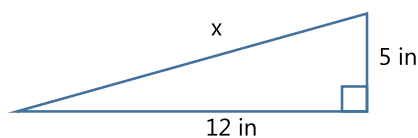
$$\begin{aligned} 39^2 + 52^2 &= x^2 \\ 1521 + 2704 &= x^2 \\ 4225 &= x^2 \\ \sqrt{4225} &= \sqrt{x^2} \\ 65 \text{ in} &= x \end{aligned}$$

Directions: Solve each problem using the Pythagorean Theorem. Round answers to the nearest tenth.

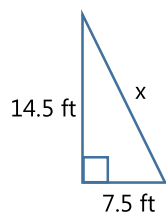
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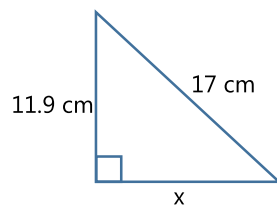
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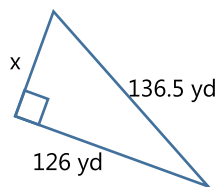
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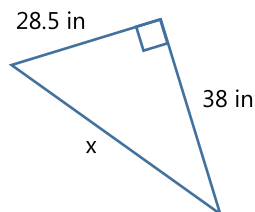
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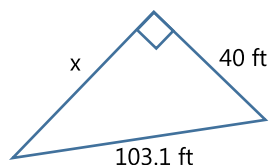
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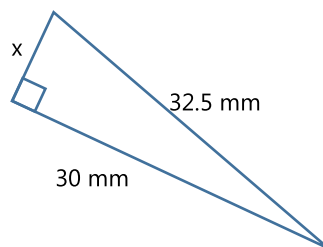
6.



7.



8.



9. A baseball diamond has four right angles and four equal sides. Each side is 90 feet.

What is the shortest distance between home plate and second base?

Round your answer to the nearest tenth.

