

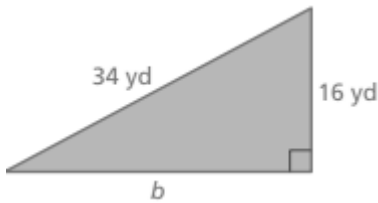
The Pythagorean Theorem

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

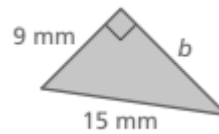
After this homework you will be able to use the **Pythagorean Theorem** to find missing sides of right triangles. You should focus on the difference between finding the hypotenuse and finding the legs.

Basic Practice. Find the missing side of each right triangle by using the **Pythagorean Theorem**. Round answers to the *nearest 10th* when necessary. Be sure to show all of your work.

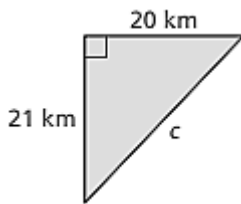
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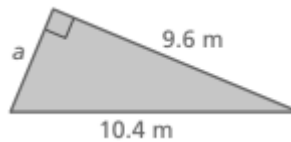
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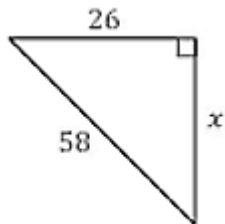
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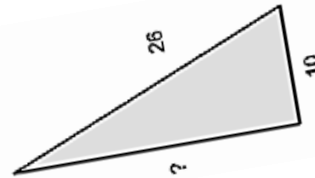
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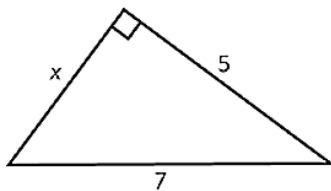
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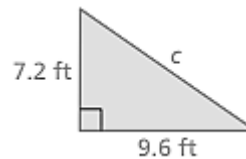
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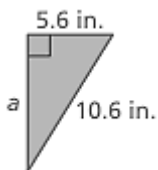
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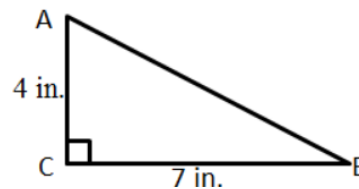
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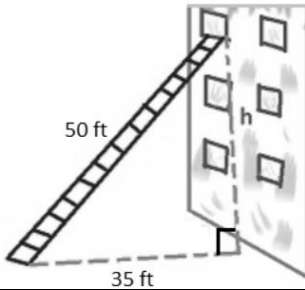


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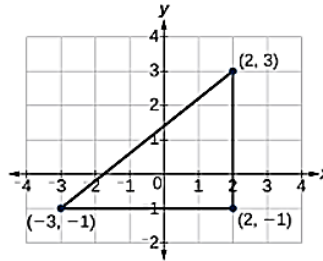


Problem solving. Use the **Pythagorean Theorem** to help you solve each problem. Round answers to the *nearest 10th* when necessary. Be sure to show all of your work.

11. Find how high up the ladder reaches the building.

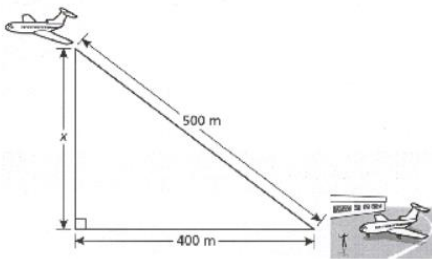


15.



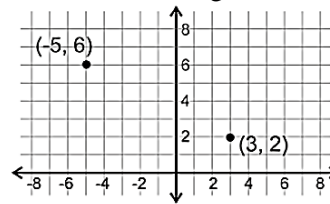
12.

According to the diagram, what is the altitude of the airplane?

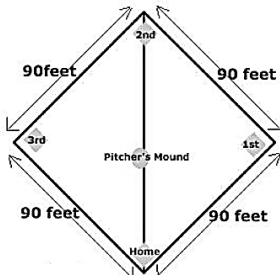


Note: Figure is not drawn to scale.

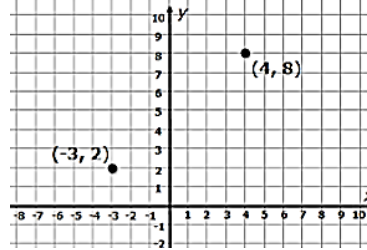
16. Find the straight line distance between the two points.



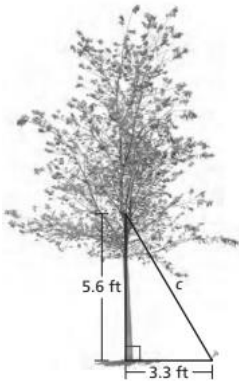
13. How far is it from home plate to second base?



17. Find the straight line distance between the two points.



14. Find c.



18. Find the length of all three sides.

