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## Notes

Algebra Section 11.4
Pages 737-742

## Anatomy of a Right Triangle



Pythagorean Theorem: If the triangle is a $\qquad$
$\qquad$ , then the
$\qquad$ of the $\qquad$ of the lengths of the $\qquad$ is equal to the
$\qquad$ squared.

Use the Pythagorean Theorem to find the missing length:

Ex:


Ex:

Ex:
4 yds


Ex:


Ex: Four people standing in a rectangle are playing Frisbee. Approximately how far is the throw from person A to person C?


Ex: A soccer player makes a corner kick to another player as shown below. How far is the kick, to the nearest yard?


CONVERSE OF THE PYTHAGOREAN THEOREM:

If a triangle has side lengths $\qquad$ , $\qquad$ , $\qquad$ , such that $\qquad$ , then the triangle is a $\qquad$
$\qquad$

- If the $\qquad$
$\qquad$ works, then it's a
$\qquad$
$\qquad$ . If not, $\qquad$

Tell whether the following side lengths could form a right triangle. Show or explain your work.

