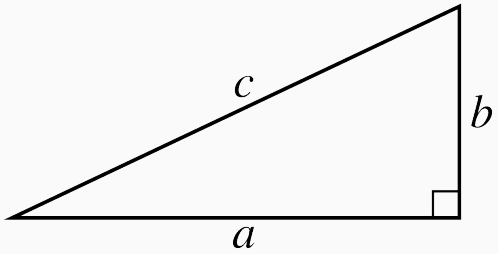
Trigonometry

The Pythagorean Theorem

Quick Review

Chipmunk Math

Pythagorean Theorem

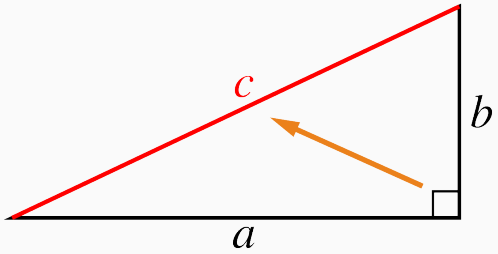


Theorem (Pythagorean)

For any right triangle,

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

Pythagorean Theorem



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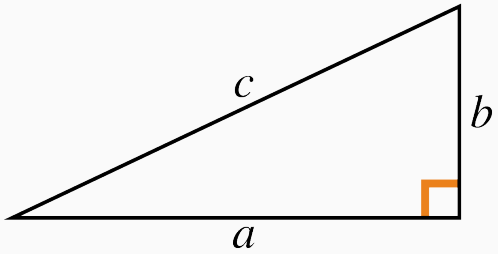

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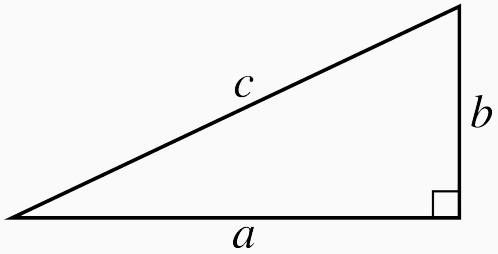

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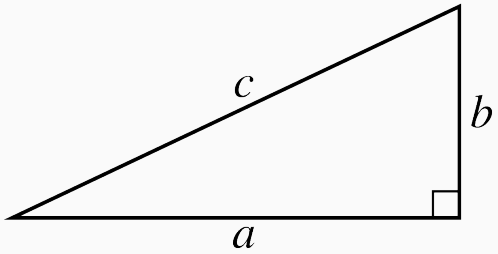

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- **Memorize** this thing. Seriously.

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Use the theorem to find unknown sides on right triangles.
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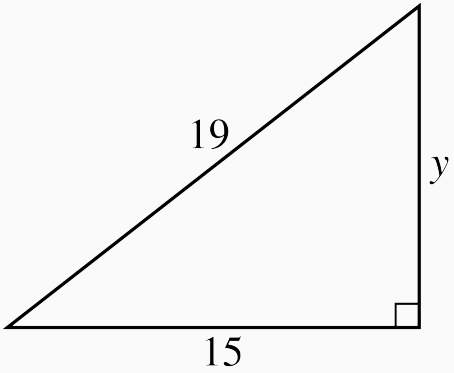

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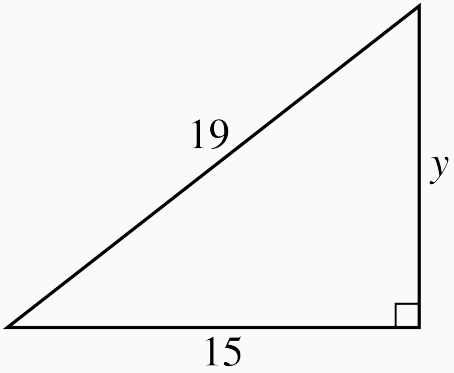

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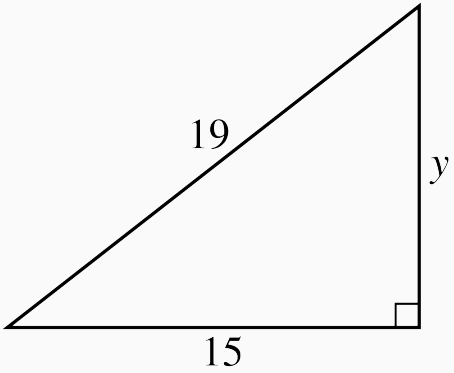

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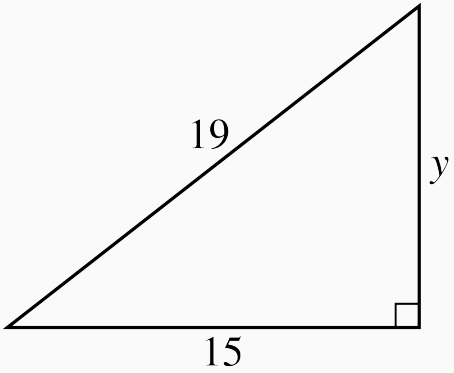

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Then solve with algebra.

Using the Pythagorean Theorem, cont.

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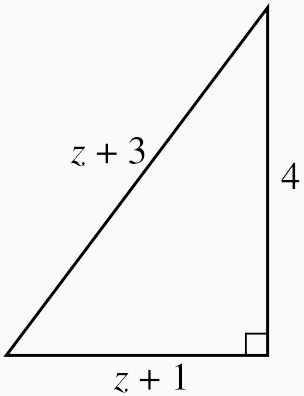

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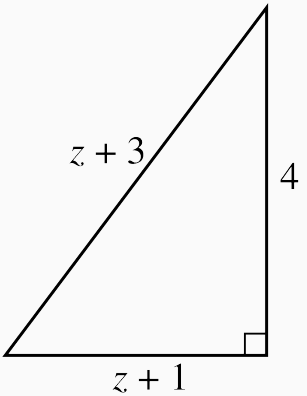

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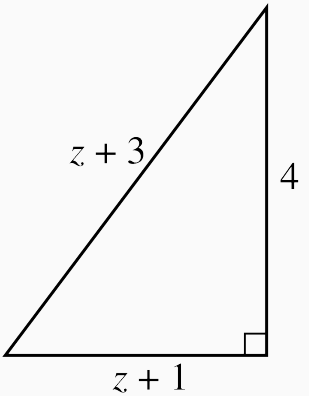

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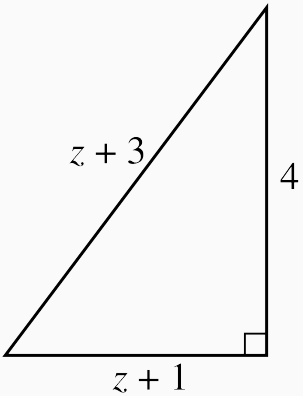

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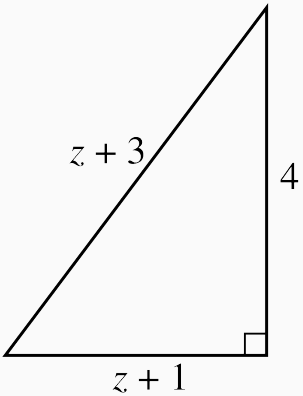

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Yes: $(z + 1)^2 + 4^2 = (z + 3)^2$

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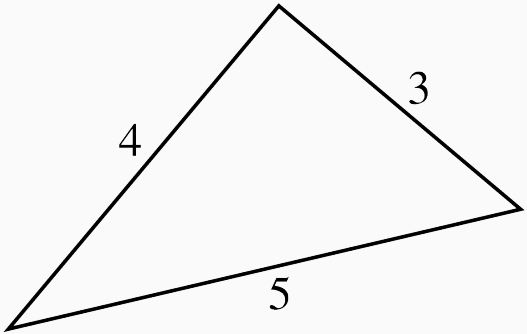

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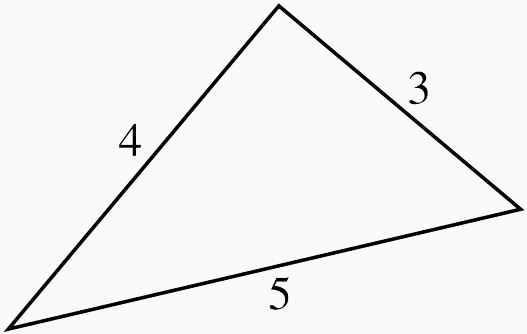

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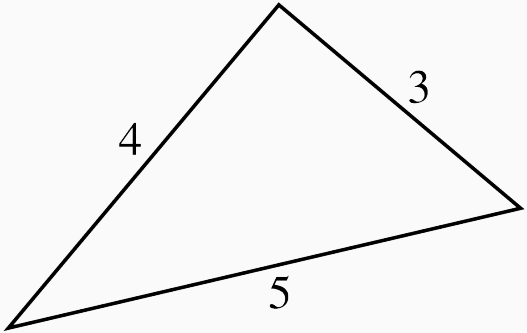

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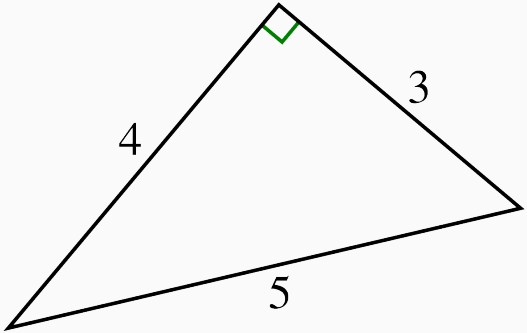

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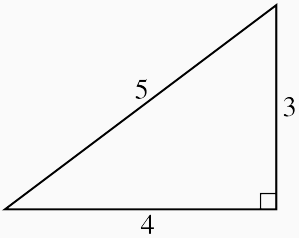

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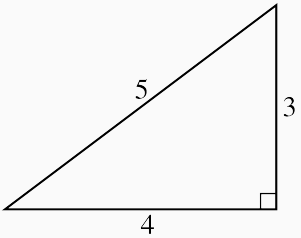

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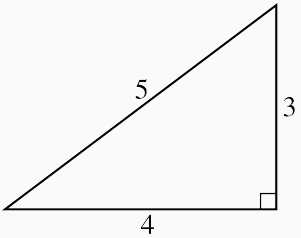

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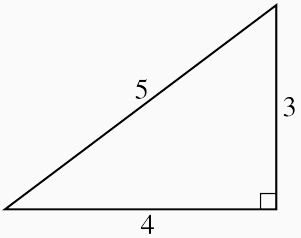

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Most common triples: $(3, 4, 5)$ $(5, 12, 13)$ $(8, 15, 17)$

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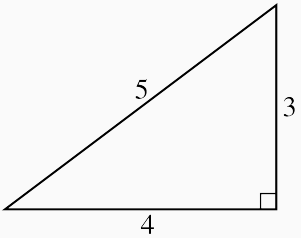

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Learn more in the video “**Extra—Pythagorean Triples**.”

Thanks for Watching!

Watch the rest of the videos on this topic!

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