Pre Algebra

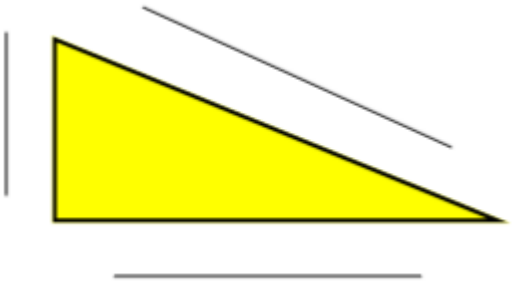
Aim: What is the relationship between the sides of a right triangle?

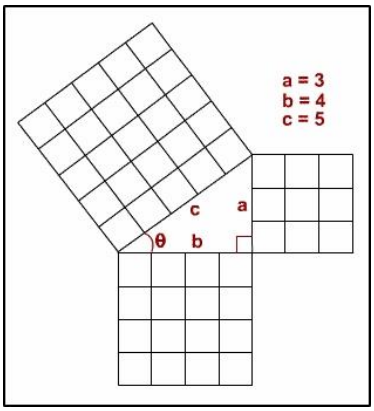
Do Now: Find the value of x.

1. $8^2 = x$
2. $x^2 = 16$
3. $2^2 + 3^2 = x$
4. $x^2 + 4 = 29$

In a right triangle, the _____ is the longest side, opposite the right angle.

The other two sides are called the _____.





The Pythagorean Theorem

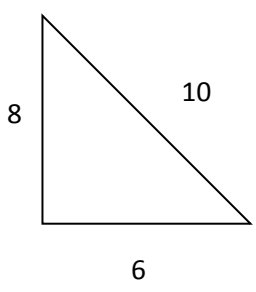
Formula: _____

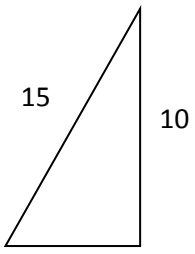
Definition:

_____

_____

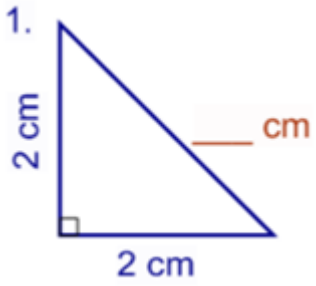
Are these right triangles? Use the Pythagorean Theorem to justify your response.





Find the length of the missing side. Round to the tenth, if necessary.

1.



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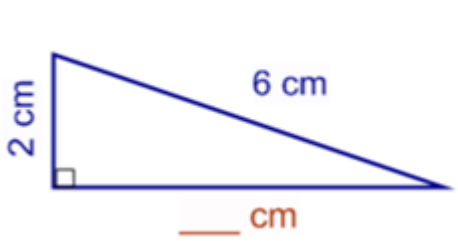

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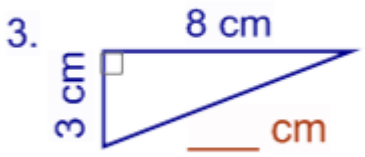

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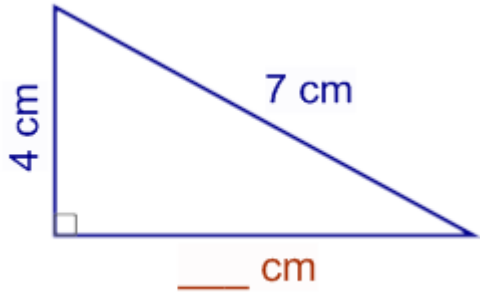

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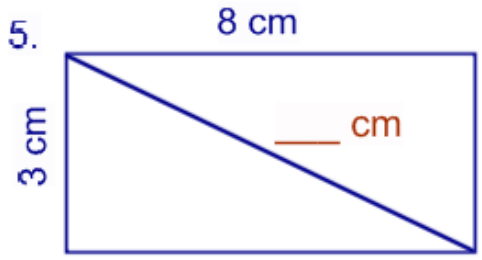

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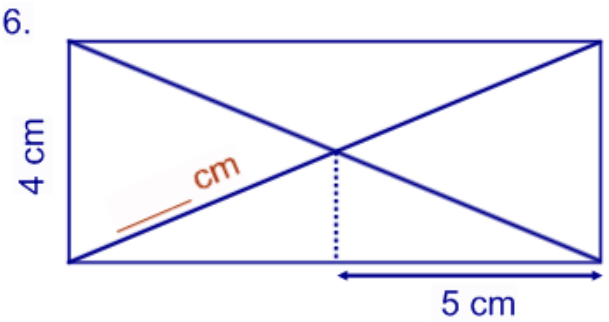

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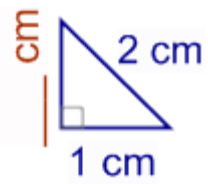

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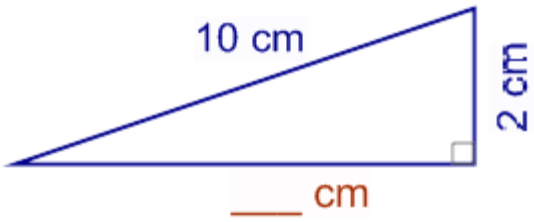

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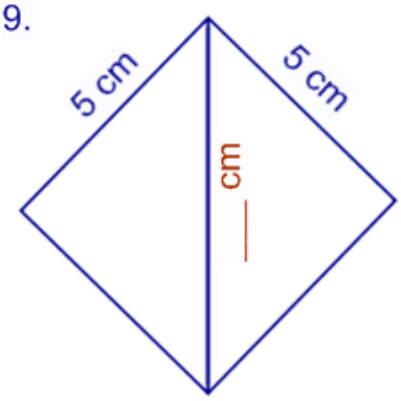

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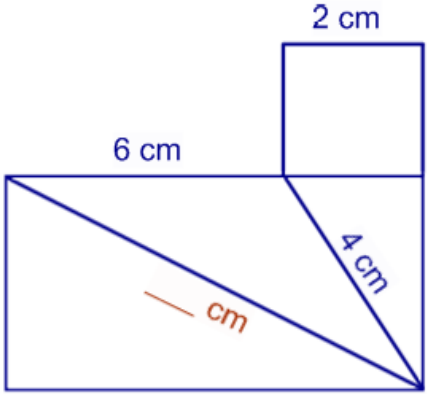

SUMMARY

1.) State the Pythagorean Theorem using variables.

2.) State the Pythagorean Theorem in words.

3.) The longest side of the triangle is a _____.

4.) The other sides are called _____.

5.) Do the following lengths represent the sides of a right triangle?

1.5 cm , 2 cm , 2.5 cm