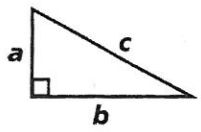
Name _____

The Pythagorean Theorem

Remember

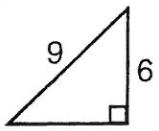
In a right triangle, the sum of the squares of the legs is equal to the square of the hypotenuse:

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



Example:

Find the length of the missing side.



$9^2 = 6^2 + b^2$

$81 = 36 + b^2$

$45 = b^2$

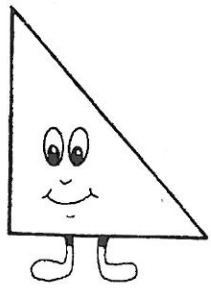
$\sqrt{45} = b$

$\sqrt{9} \cdot \sqrt{5} = b$

$3\sqrt{5} = b$

Solve for the missing side. Use the answer code to find the special name for three integers whose lengths form a right triangle.

TIP! A 3-4-5 triangle has a leg-to-leg-to-hypotenuse ratio of 3:4:5. If you can spot multiples of these numbers, you can solve those problems easily.



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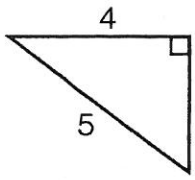

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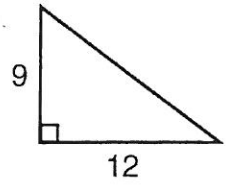

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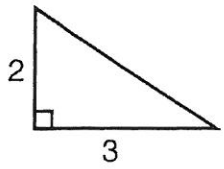

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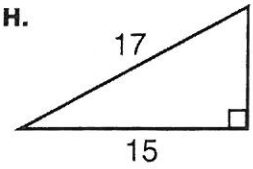

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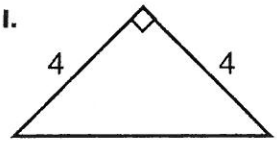

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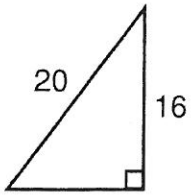

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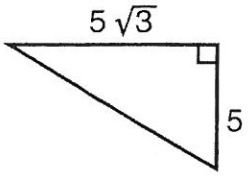

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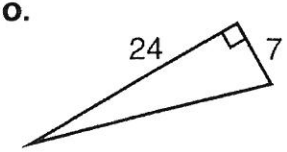

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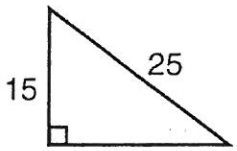

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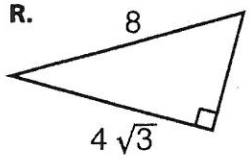

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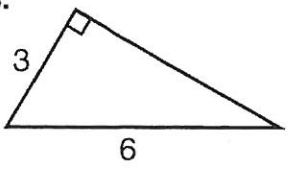

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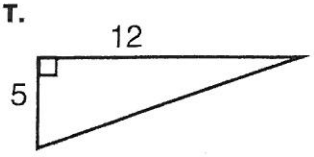

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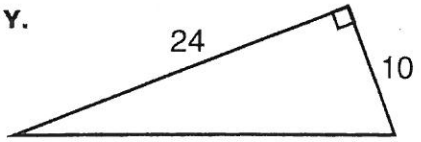


20	26	13	8	3	$\sqrt{13}$	25	4	15	3	10

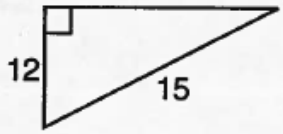
13	4	$4\sqrt{2}$	20	12	15	$3\sqrt{3}$

College Algebra
Geometry Review

Name_____
Pythagorean Theorem Practice Worksheet

Solve for the missing side. Use the decoder to find out what the numbers 3, 6, 10, and 15 have in common.

1.



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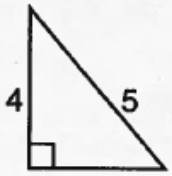

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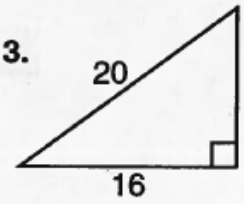

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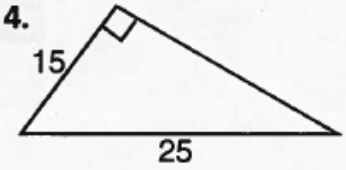

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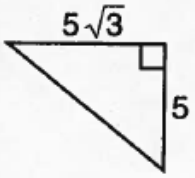

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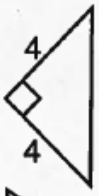

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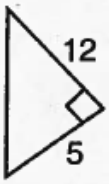

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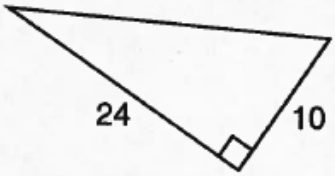

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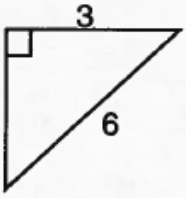

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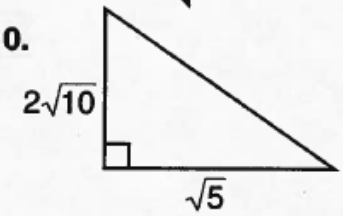
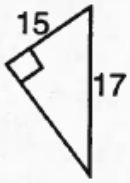


11.

12.



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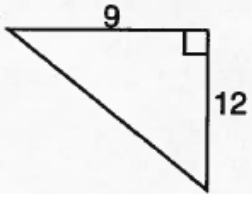

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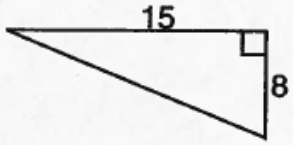

A	B	E	G	H	I	L	M	N	R	S	T	U	Y
3	$4\sqrt{2}$	$3\sqrt{3}$	8	9	10	12	13	15	17	20	$3\sqrt{5}$	25	26

10	1	9	8		2	14	9		2	3	3		
10	14	5	2	13	12	11	3	2	14				
13	11	7	6	9	14	4							