Pythagorean Triples Name: Date:

	Triple	Factor	New Triple	Factor	New Triple
1)	3, 4, 5	2		10	
2)	5, 12, 13	2		10	
3)	7, 24, 25	2		10	
4)	8, 15, 17	2		10	
5)	9, 40, 41	2		10	
6)	11, 60, 61	2		10	
7)	$3\sqrt{7}, 4\sqrt{7}, 5\sqrt{7}$	2		10	

8) Looking at #7 above, if all three numbers of a triple have the same radical (7, 2, . . .) would you get a similar result as you did in #7?

Determine whether each set of numbers form a Pythagorean triple.

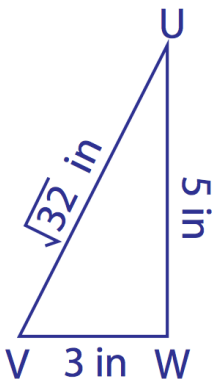
9) 36, 27, 45 10) 13, 12, 5 11) $\sqrt{6}, 7, \sqrt{1}$

12) 9, 8, 12 13) $\sqrt{15}, \sqrt{5}, 14$ 14) 7, 24, 25

Pythagorean Triples Name: Date:

15) $\sqrt{3}, \sqrt{7}, 1$ 16) 3, 4, 5 17) $\sqrt{6}, \sqrt{2}, \sqrt{13}$

18) Determine whether the sides of the triangle form a Pythagorean triple.



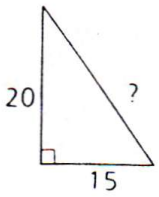
Part Three: Problem Sets

Problem Set A

In problems 1–5, find the missing side in each triangle.

1 (3, 4, 5)

a



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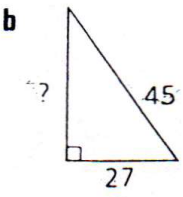

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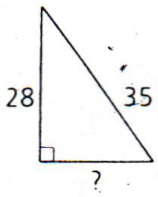

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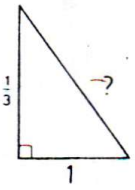

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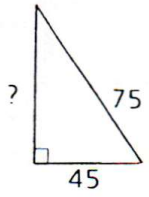
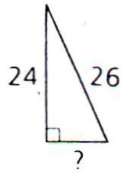


2 (5, 12, 13)

a



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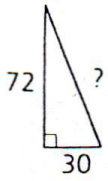

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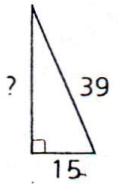

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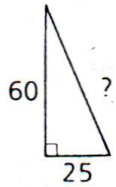

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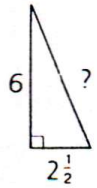
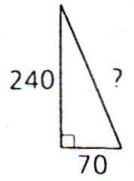


3 (7, 24, 25)

a



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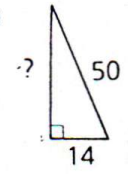

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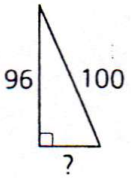

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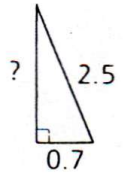

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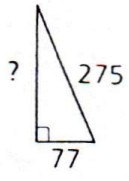
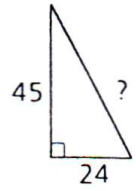


4 (8, 15, 17)

a



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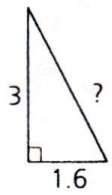

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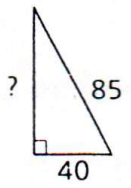

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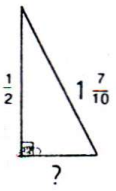

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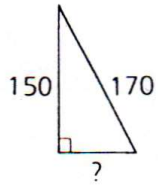
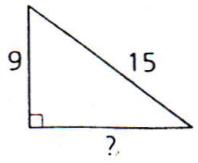


5 Mixed

a



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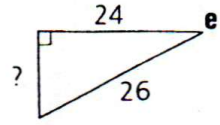

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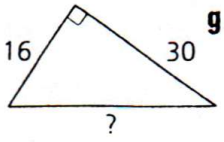

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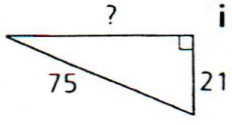

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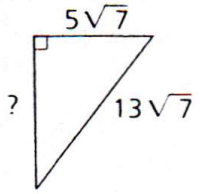

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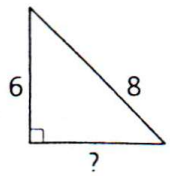

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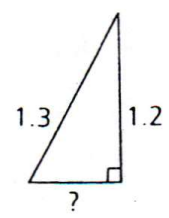

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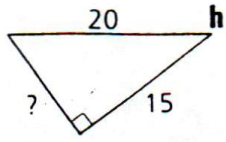

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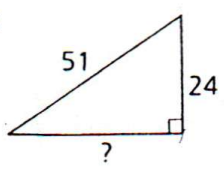
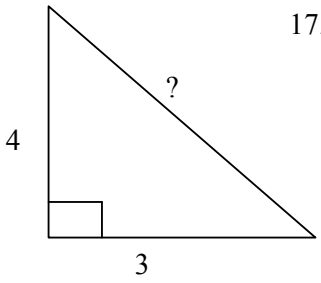


Using the Pythagorean Common Triples, find the missing side (triangles are rarely to scale).

16.



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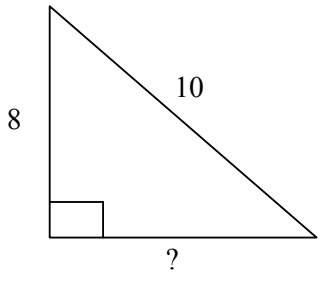

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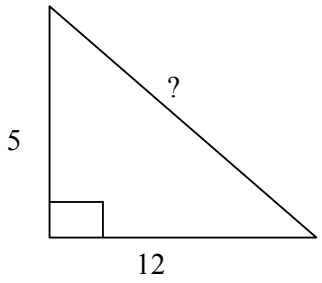

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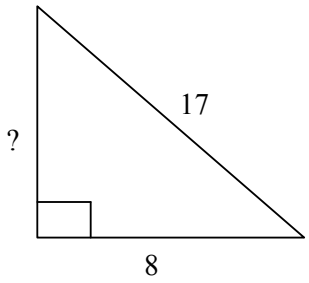

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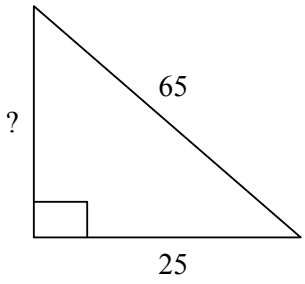

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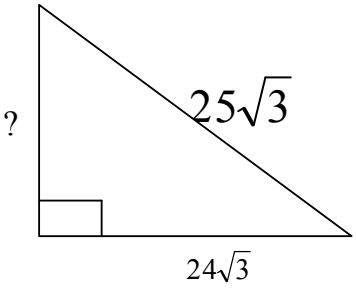

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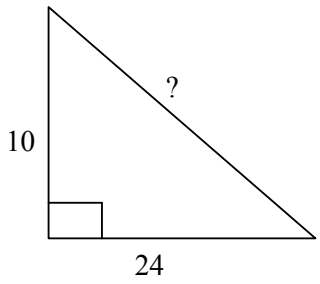

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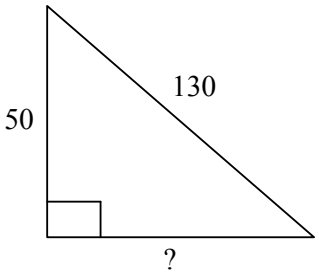

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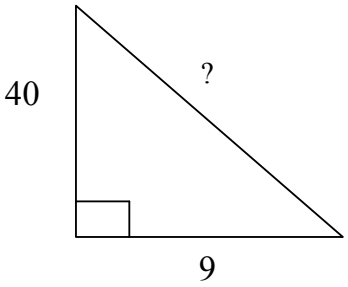

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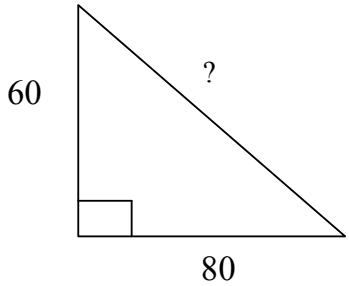

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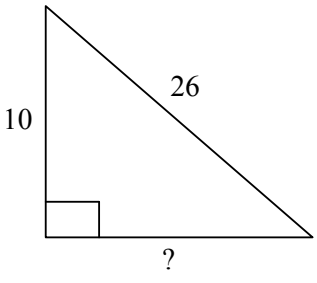

27.