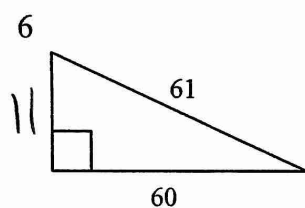
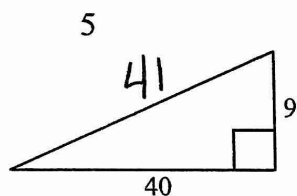
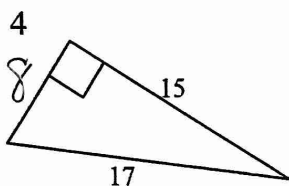
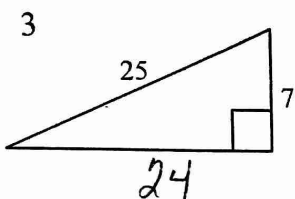
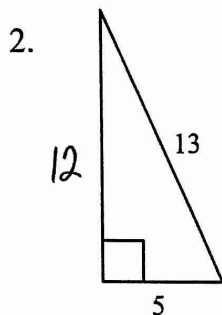
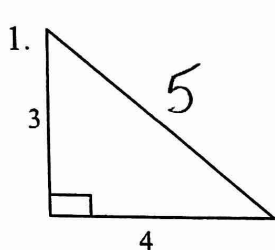


I. Use Pythagorean Theorem to find the missing dimension of each right triangle. Then complete the chart.



	Short Leg	Long Leg	Hypotenuse
1.	3	4	5
2.	5	12	13
3.	7	24	25
4.	8	15	17
5.	9	40	41
6.	11	60	61

Given the triples above that you put in the table, use the factors in the table below to compute additional triples. (Use the chart above, and fill in the chart below.)

	Triple	Factor	New Triple	Factor	New Triple
7.	3, 4, 5	2	6, 8, 10	10	30, 40, 50
8.	5, 12, 13	2	10, 24, 26	10	50, 120, 130
9.	7, 24, 25	2	14, 48, 50	10	70, 240, 250
10.	8, 15, 17	2	16, 30, 34	10	80, 150, 170
11.	9, 40, 41	2	18, 80, 82	10	90, 400, 410
12.	11, 60, 61	2	22, 120, 122	10	110, 600, 610
13.	6, 8, 10	2	12, 16, 20	10	60, 80, 100
14.	3, 4, 5	3	9, 12, 15	5	15, 20, 25
15.	$3\sqrt{7}, 4\sqrt{7}, 5\sqrt{7}$	2	$6\sqrt{7}, 8\sqrt{7}, 10\sqrt{7}$	10	$30\sqrt{7}, 40\sqrt{7}, 50\sqrt{7}$

Looking at #15 above, if all three numbers of a triple have the same radical ( $\sqrt{7}, \sqrt{2}, \dots$ ) – would you get a similar result as you did in #15?

yes

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

