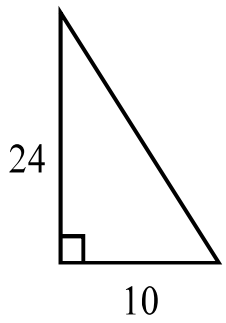
Pythagorean Theorem 2 (KEY)

Geometry

Use the Pythagorean Theorem to find the missing lengths in these right triangles. Put answers in simplest radical form and to the nearest tenth, if the answer isn't a whole number.

1)



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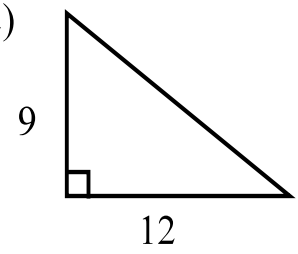

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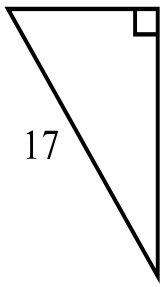

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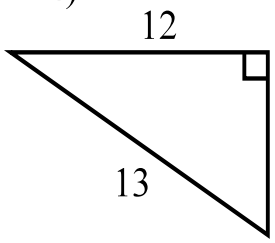
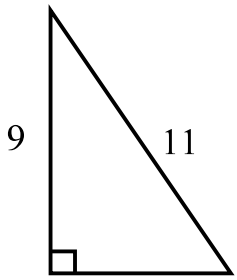


c = 26	c = 15	b = 15	a = 5

5)



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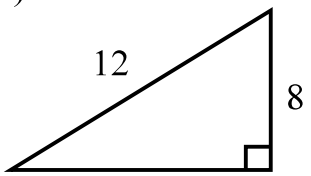
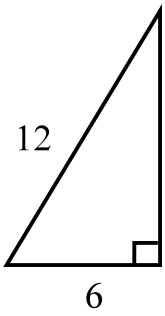
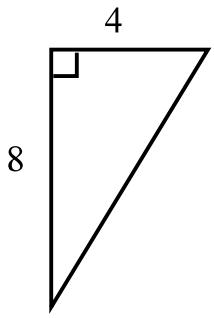


7)



8)



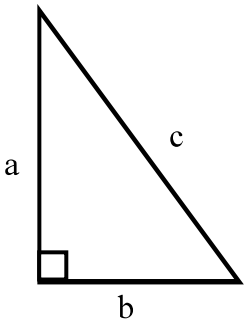
a = 2√10 = 6.3	b = 4√5 = 8.9	b = 6√3 = 10.4	c = 4√5 = 8.9

9) a = 12, b = 35, c = ?

c = 37

10) a = 15, b = 20, c = ?

c = 25



11) a = 13, b = ?, c = 85

b = 84

12) a = ?, b = 48, c = 50

b = 14

13) a = 4, b = ?, c = 6

b = 2√5 = 4.5

14) a = 3, b = 9, c = ?

c = 3√10 = 9.5

15) a = ?, b = 4, c = 12

a = 8√2 = 11.3

16) a = 10, b = 5, c = ?

c = 5√5 = 11.2

Will a triangle with sides of the given lengths be a right triangle? If not, is the triangle obtuse or acute?

17) 60, 11, and 61

Right

18) 4, 7, and 8

Not Right. Acute.

19) 37,12 , and 35

Right

20) 15, 10, and 9

Not Right. Obtuse.

21) 20, 15, and 18

Not Right. Acute.

22) 41, 9, and 40

Right