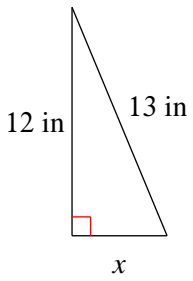
Candle Center - Infinite Geometry Name_____

The Pythagorean Theorem and Its Converse

Date_____ Period____

Find the missing side of each triangle. Round your answers to the nearest tenth if necessary.

1)



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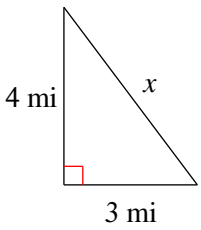

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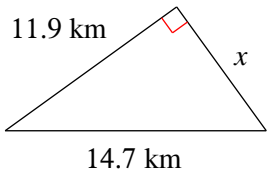

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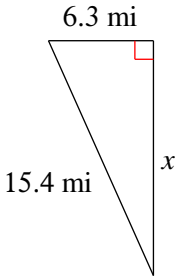
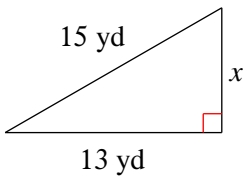


Find the missing side of each triangle. Leave your answers in simplest radical form.

5)



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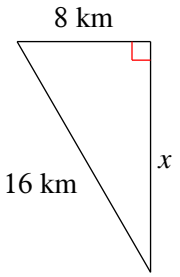


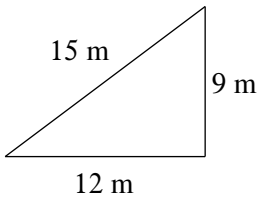
Find the missing side of each right triangle. Side *c* is the hypotenuse. Sides *a* and *b* are the legs. Leave your answers in simplest radical form.

7) $a = 11$ m, $c = 15$ m

8) $b = \sqrt{6}$ yd, $c = 4$ yd

State if each triangle is a right triangle.

9)



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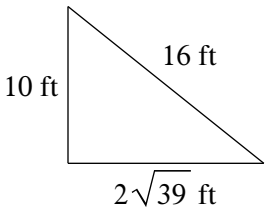

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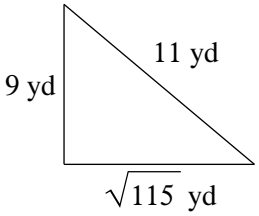

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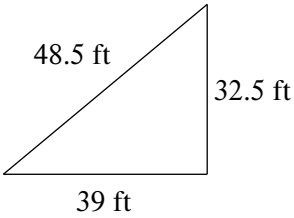


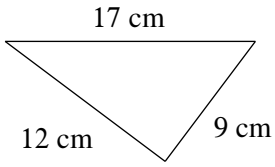
State if the three sides lengths form a right triangle.

13) 10 cm, 49.5 cm, 50.5 cm

14) 9 in, 12 in, 15 in

State if each triangle is acute, obtuse, or right.

15)



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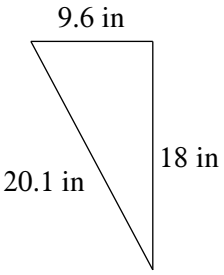


State if the three side lengths form an acute, obtuse, or right triangle.

17) 6 mi, $2\sqrt{55}$ mi, 17 mi

18) 4.8 km, 28.6 km, 29 km

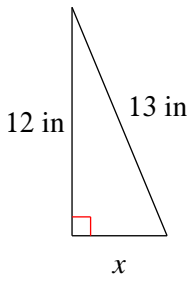
Candle Center - Infinite Geometry Name_____

The Pythagorean Theorem and Its Converse

Date_____ Period____

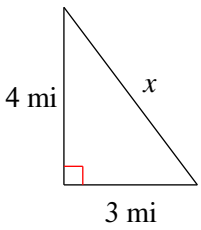
Find the missing side of each triangle. Round your answers to the nearest tenth if necessary.

1)



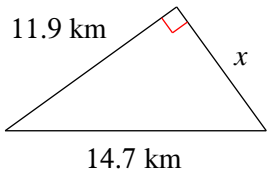
5 in

2)



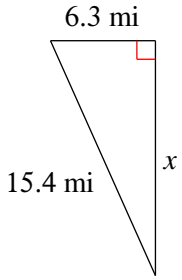
5 mi

3)



8.6 km

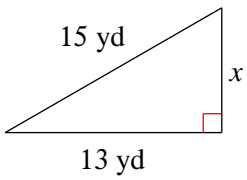
4)



14.1 mi

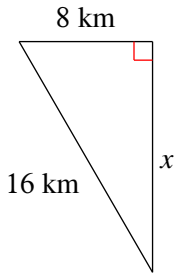
Find the missing side of each triangle. Leave your answers in simplest radical form.

5)



$2\sqrt{14}$ yd

6)



$8\sqrt{3}$ km

Find the missing side of each right triangle. Side *c* is the hypotenuse. Sides *a* and *b* are the legs. Leave your answers in simplest radical form.

7) $a = 11$ m, $c = 15$ m

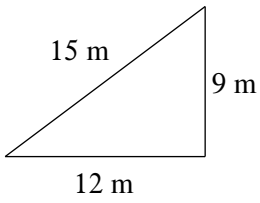
$2\sqrt{26}$ m

8) $b = \sqrt{6}$ yd, $c = 4$ yd

$\sqrt{10}$ yd

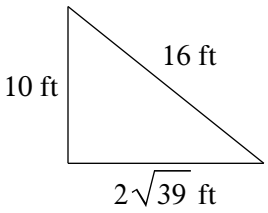
State if each triangle is a right triangle.

9)



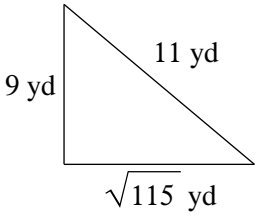
Yes

10)



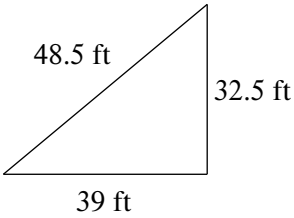
Yes

11)



No

12)



No

State if the three sides lengths form a right triangle.

13) 10 cm, 49.5 cm, 50.5 cm

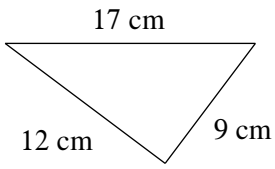
Yes

14) 9 in, 12 in, 15 in

Yes

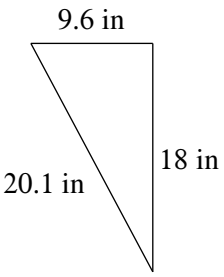
State if each triangle is acute, obtuse, or right.

15)



Obtuse

16)



Acute

State if the three side lengths form an acute, obtuse, or right triangle.

17) 6 mi, $2\sqrt{55}$ mi, 17 mi

Obtuse

18) 4.8 km, 28.6 km, 29 km

Right