SECONDARY MATH II
DOMAIN 5 G.SRT.8
WS 5.12 PYTHAGOREAN THEOREM

NAME_____
DATE_____
CLASS_____

The Pythagorean Theorem

If c is the measure of the hypotenuse, find each missing measure.
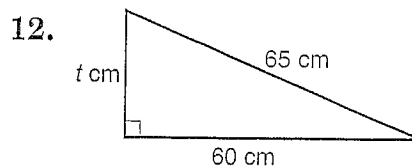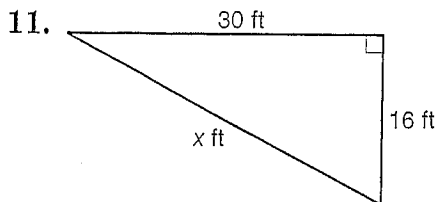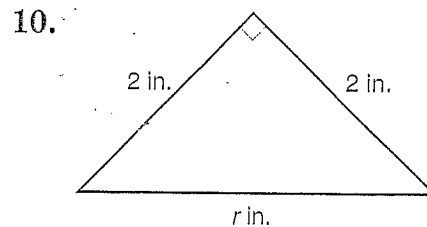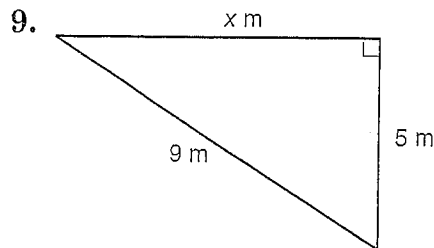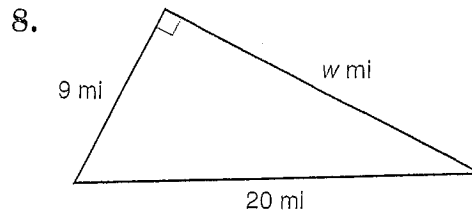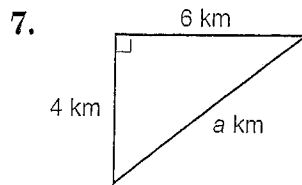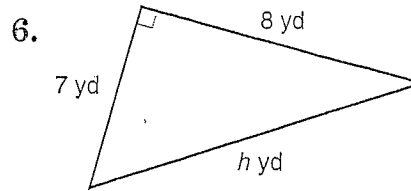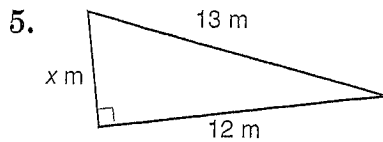*Round to the nearest tenth, if necessary.*

1. $a = 8, b = 13, c = ?$

2. $a = 4, c = 6, b = ?$

3. $a = \sqrt{13}, b = \sqrt{12}, c = ?$

4. $b = \sqrt{52}, c = \sqrt{101}, a = ?$

Find the missing measure in each right triangle. Round to the nearest tenth, if necessary.

5.

13 m

x m

12 m

6.

8 yd

7 yd

h yd

7.

6 km

4 km

a km

8.

9 mi

w mi

20 mi

9.

x m

9 m

5 m

10.

2 in.   2 in.

r in.

11.

30 ft

x ft

16 ft

12.

t cm

65 cm

60 cm

The lengths of three sides of a triangle are given. Determine whether each triangle is a right triangle.
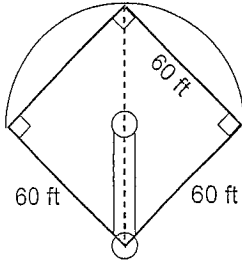
13. 14 ft, 48 ft, 50 ft

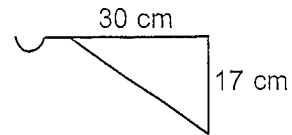14. 50 yd, 75 yd, 85 yd

15. 15 cm, 36 cm, 39 cm

16. 45 mm, 60 mm, 80 mm
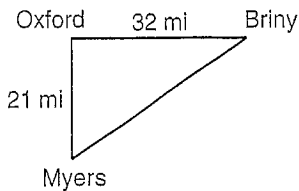
Solve. Round decimal answers to the nearest tenth.

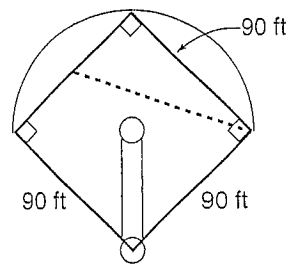17. In a softball game, how far must the catcher throw to second base?

60 ft

60 ft   60 ft

18. How long must the brace be on a closet rod holder if the vertical side is 17 cm and the horizontal side must be attached 30 cm from the wall?

30 cm

17 cm

19. If Briny is 32 miles due east of Oxford and Myers is 21 miles due south of Oxford, how far is the shortest distance from Myers to Briny?

Oxford   32 mi   Briny

21 mi

Myers

20. In a baseball game, how far must the shortstop (halfway between second base and third base) throw to make an out at first base?

90 ft

90 ft   90 ft

21. How long must a ladder be to reach a window 13 feet above ground? For the sake of stability, the ladder must be placed 5 feet away from the base of the wall.

13 ft

5 ft