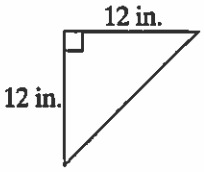
Name _____ Class _____ Date _____

Practice 3-2

The Pythagorean Theorem

Find the length of the hypotenuse of each triangle. If necessary, round to the nearest tenth.

1. 

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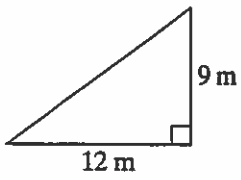
2. 

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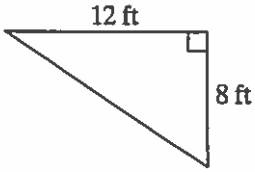
3. 

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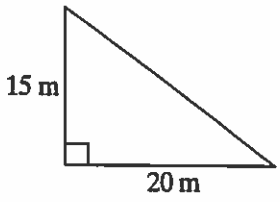
4. 

_____

Let a and b represent the lengths of the legs of a right triangle. Find the length of the hypotenuse. If necessary, round to the nearest tenth.

5. $a = 14, b = 18$

_____

6. $a = 7, b = 23$

_____

7. $a = 15, b = 8$

_____

Solve.

8. A circus performer walks on a tightrope 25 feet above the ground. The tightrope is supported by two beams and two support cables. If the distance between each beam and the base of its suppport cable is 15 feet, what is the length of the support cable? Round to the nearest foot.

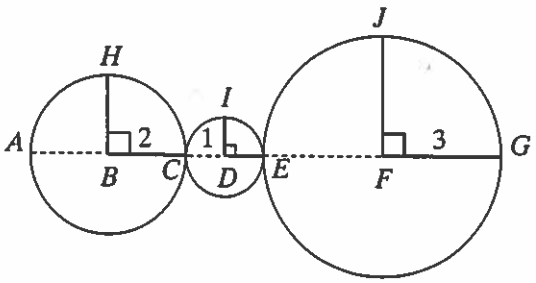
_____

You are given three circles, as shown. Points *A, B, C, D, E, F,* and *G* lie on the same line. Find each length to the nearest tenth.

9. *HD* _____

10. *IE* _____

11. *JD* _____

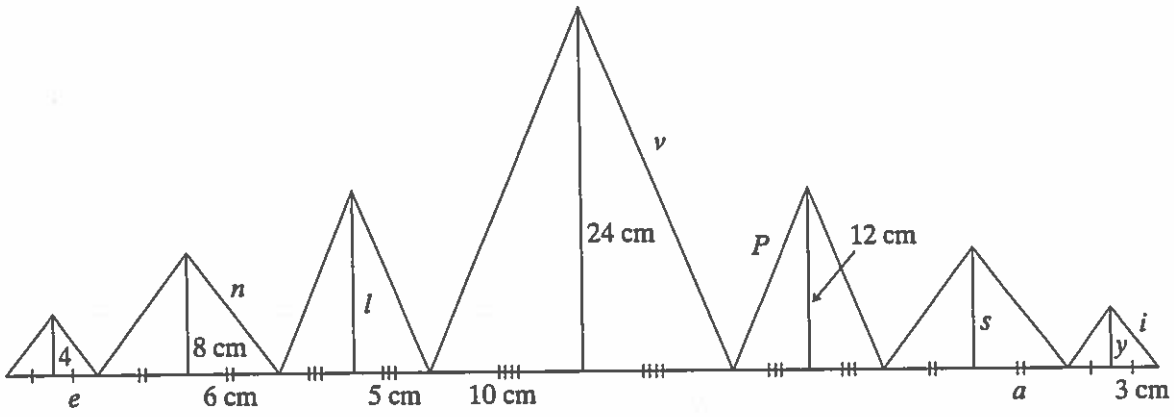


Name _____ Class _____ Date _____

Puzzle 3-2

The Pythagorean Theorem

The Homecoming Committee was assigned the task of designing a crown for the Homecoming King. They created a design consisting of triangles that were symmetrical from the center of the crown out. Help the committee find the missing measurements for their design.



Use your answers to find out which of the original thirteen colonies was not bordered by the Atlantic Ocean.

13	3	10	10	8	4	12	26	6	10	5	6