Name _____ Date _____

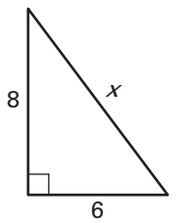
LESSON 7.1

Practice A

For use with pages 432–439

Find the length of the hypotenuse of the right triangle.

1.



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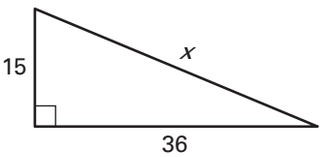

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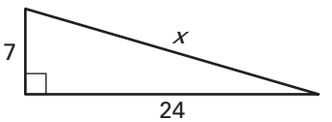

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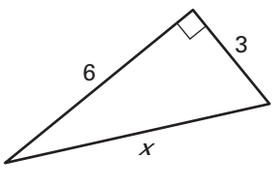

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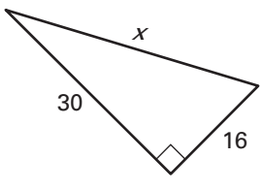

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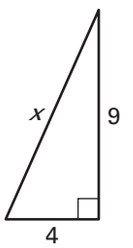
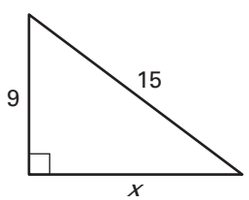


Find the unknown leg length *x*.

7.



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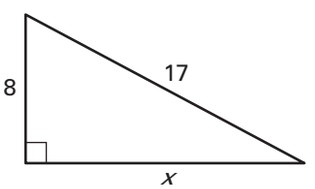

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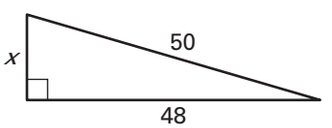
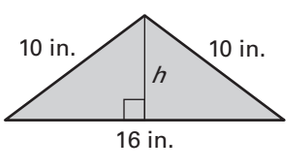


Find the area of the isosceles triangle.

10.



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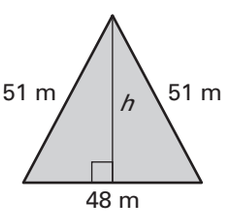

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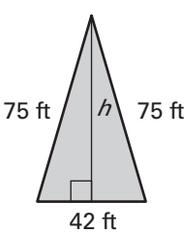


13. **Multiple Choice** What is the length of the hypotenuse of a right triangle with leg lengths of 5 inches and 12 inches?

A. 11 inches **B.** 13 inches **C.** 15 inches **D.** 17 inches

The given lengths are two sides of a right triangle. All three side lengths of the triangle are integers and together form a Pythagorean triple. Find the length of the third side and tell whether it is a leg or the hypotenuse.

14. 30 and 40

15. 15 and 36

16. 70 and 250

17. 45 and 51

18. 15 and 20

19. 96 and 100

Name _____ Date _____

LESSON 7.1

Practice A *continued*

For use with pages 432–439

Find the area of a right triangle with given leg ℓ and hypotenuse h. Round decimal answers to the nearest tenth.

20. $\ell = 12$ cm, $h = 15$ cm

21. $\ell = 10$ ft, $h = 24$ ft

22. $\ell = 14$ in., $h = 50$ in.

23. $\ell = 15$ mi, $h = 39$ mi

24. $\ell = 21$ in., $h = 72$ in.

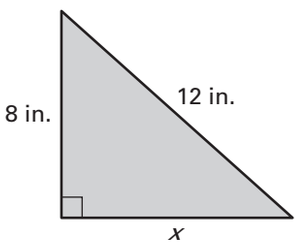
25. $\ell = 45$ m, $h = 51$ m

26. **Multiple Choice** What is the area of a right triangle with a leg length of 30 meters and a hypotenuse length of 34 meters?

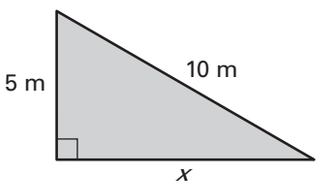
A. 180 m^2 **B.** 200 m^2 **C.** 220 m^2 **D.** 240 m^2

Find the area of the right triangle. Write your answer in simplest radical form.

27.



28.



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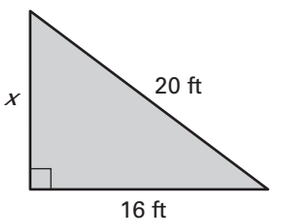

30. **Ladder** A 20 foot ladder is resting against the side of a house. The base of the ladder is 4 feet away from the house. Approximately how high above the ground does the ladder touch the house?

In Exercises 31–33, use the following information.

Real Estate An investor owns a triangular plot of land as shown in the diagram.

31. Find the perimeter of the plot of land.

32. One acre of land is equivalent to 43,560 square feet. How many acres are in this plot of land? Round to two decimal places.

33. The investor is planning on selling the land. The market rate in this area is $5000 per acre. How much should the investor ask for the land?