WS1

NAME_____ DATE_____ PER._____

Introduction to Pythagorean Theorem Assignment

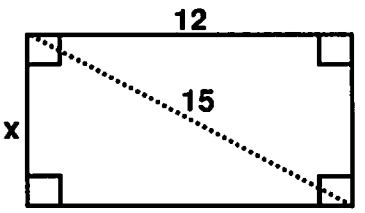
Use the Pythagorean Theorem to find the missing length. <u>Give answers to nearest hundredth.</u>

1. a = 8 and b = 6.

2. a = 24 and c = 28.

Solve each problem. Round to the nearest hundredths.

3.



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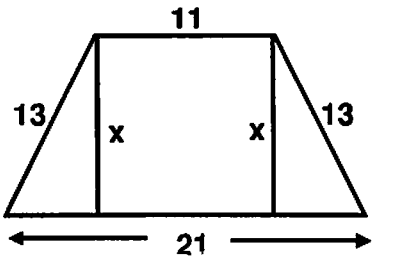

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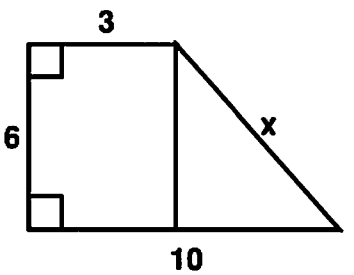

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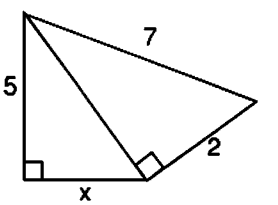

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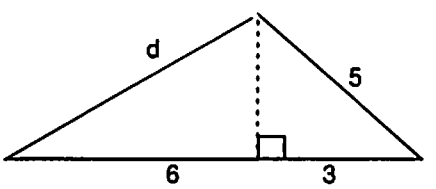
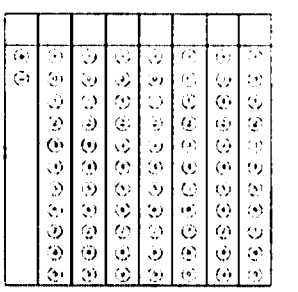


8. The slide at the playground is 12 feet tall. If the bottom of the slide is 15 feet from the base of the ladder, how long is the slide?

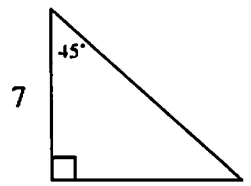


Name:_____Period:_____

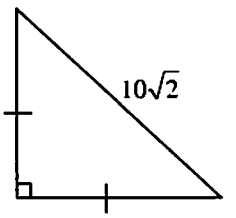
Isosceles Right Triangles Assignment

I. Fill in the length of each segment in the following figures.

1



2



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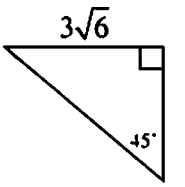

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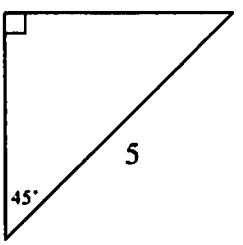

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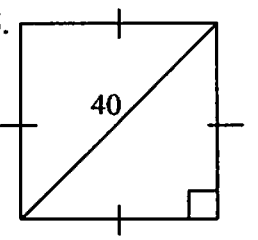

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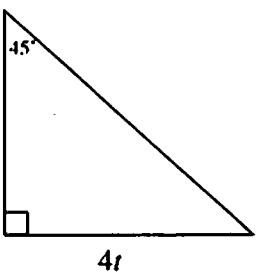

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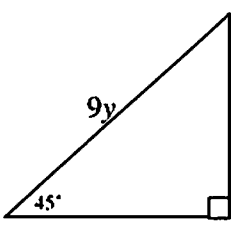

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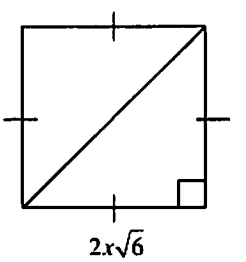

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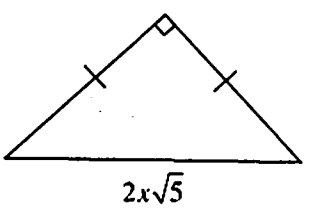
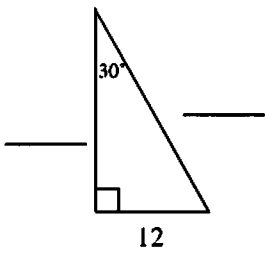


Name:_____Period:_____

30°-60°-90° Triangles Assignment

Fill in the blanks for the special right triangles.

1.



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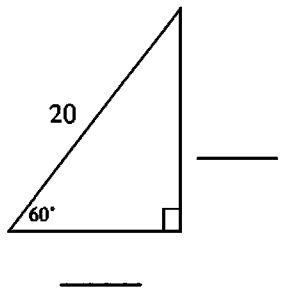

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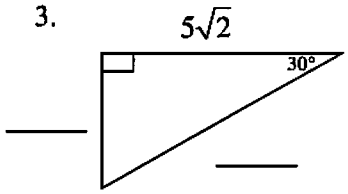

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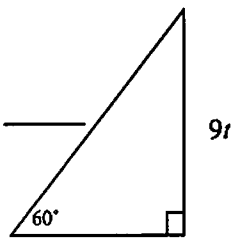

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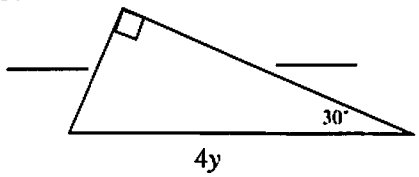

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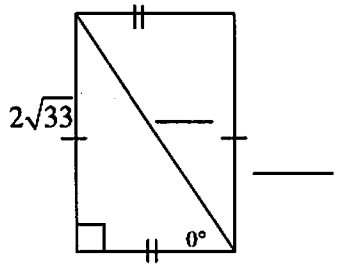
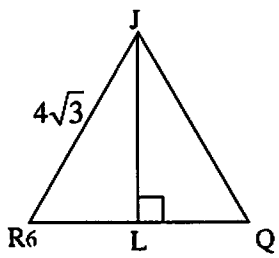


7. ΔRJQ is equilateral.



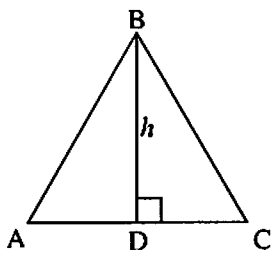
JQ = _____

RL = _____

LQ = _____

JL = _____

8. ΔABC is equilateral.



AD = _____

DC = _____

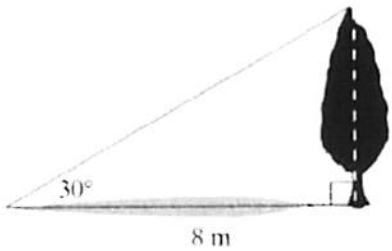
AB = _____

BC = _____

14. Which of the following could be the side lengths of 45°-45°-90°triangle?

A 2 in, 4 in, 2 2in **B** 2 in, 4 in, 2 3in **C** 2 in, 2 in, 2 2in **D** 4 in, 4 in, 4 3 in

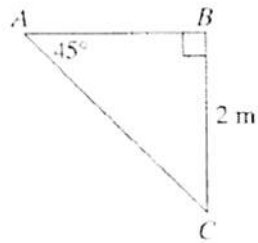
15 If a tree casts an 8-meter shadow, and the angle from the ground to the tree is 30°, what is the approximate height of the tree?



A 4.6 m **C** 13.7 m

B 6.3 m **D** 16 m

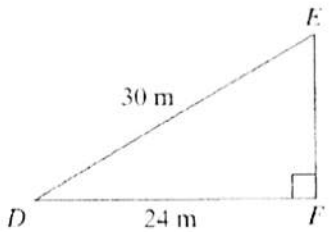
16 What is the approximate perimeter of triangle ABC?



F 2.0 m **H** 5.4 m

G 4.0 m **J** 6.8 m

17 What is the area of triangle DEF?



A 216 m^2 **C** 432 m^2

B 360 m^2 **D** 720 m^2

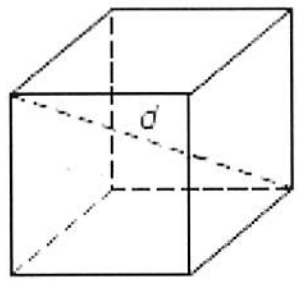
18. A cube with side lengths of 4 inches is shown below. How could you find the length of *d*, the diagonal of the cube?

A $\sqrt{4^2+(4\sqrt{3})^2}=d^2$

B $\sqrt{4^2+(4\sqrt{3})^2}=d$

C $\sqrt{4+4}=d^2$

D $\sqrt{4+4\sqrt{3}}=d^2$



19. Jenna is flying a kite on a very windy day. The kite string makes a 60 angle with the ground. The kite is directly above the sandbox, which is 28 feet away from where Jenna is standing. Approximately how much of the kite string is currently being used?

A 56 feet
B 48.5 feet
C 40 feet
D 14 feet