

## Homework 2.2 due Oct 5 \*2 Problems Require Work

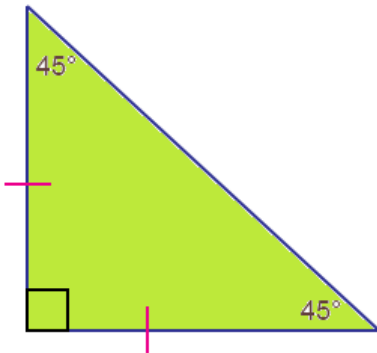
12 Questions

NAME : \_\_\_\_\_

CLASS : \_\_\_\_\_

DATE : \_\_\_\_\_

1.



What are the lengths of the legs if the hypotenuse is  $14\sqrt{2}$  ?

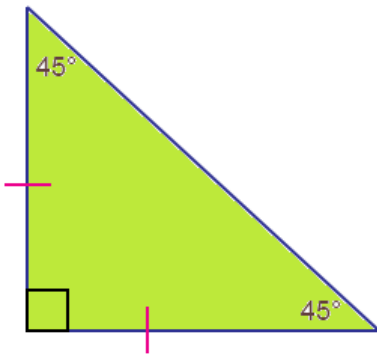
a)  $14\sqrt{2}$

b) 14

c) 7

d) 28

2.



If the legs measure 11 units, what is the length of the hypotenuse?

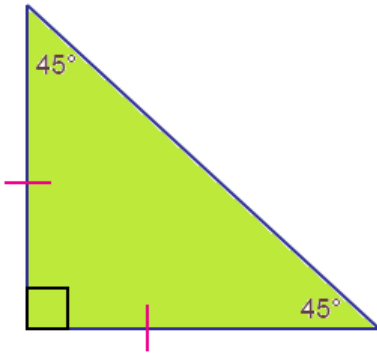
a) 11

b) 22

c)  $11\sqrt{2}$

d)  $\sqrt{22}$

3.



If the hypotenuse measures 24, what do the legs measure?

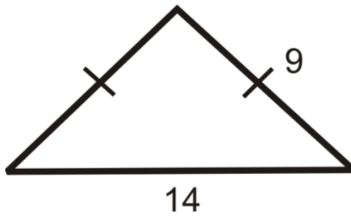
a) 24

b)  $24\sqrt{2}$

c)  $12\sqrt{2}$

d) 12

4.



Given the image, which two statements are correct?

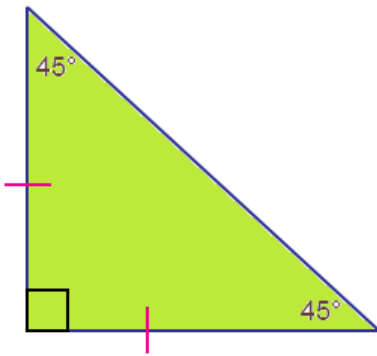
a) The other leg is 9

b) The other leg is 14

c) The perimeter of the isosceles triangle is 32

d) The other leg and perimeter cannot be determined

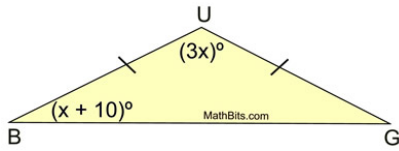
5.



In an isosceles right triangle, the sides have a pattern of

---

6.



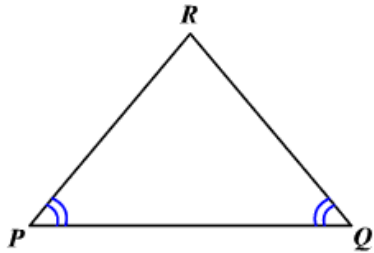
Given the isosceles triangle, solve for x

a)  $X = 32$

b)  $X = 42.5$

c)  $X = 40$

7.



If Angle R measures 88 degrees, what are the measures of Angles P and Q?

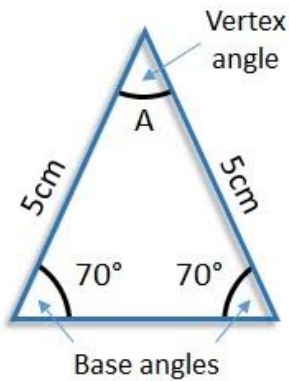
a) 88

b) 92

c) 46

d) 44

8.



What is the measure of the Vertex Angle (A)?

a) 70

b) 40

c) 30

9. A 10-foot ladder is leaning against a building such that it touches the building at a height of 7 feet. How far is the base of the ladder from the base of the building? *PYTHAGOREAN WORK REQUIRED*

a) 12.2 feet

b) 51 feet

c) 3 feet

d) 7.1 feet

10. A right triangles has a leg of measure 3 and a hypotenuse of measure 5. What is the measure of the other leg?

a) 2

b) 4

c) 3

d) 5

11. A rectangle has a diagonal of measure 15 and its width measures 9. Find the length of the rectangle and then determine its perimeter {choose two correct answers} **PYTHAGOREAN WORK REQUIRED**

a) Perimeter is 24

b) Perimeter is 42

c) Its length is 12

d) Its length is 17.5

e) Perimeter is 53

12. A square has a diagonal of measure  $13\sqrt{2}$  . What is the perimeter of the square?

a) 13

b)  $52\sqrt{2}$

c) 52