

Name \_\_\_\_\_  
Right Triangle Review Sheet #2

Date \_\_\_\_\_ Class \_\_\_\_\_  
Mr. Lynch

**Simplify:**

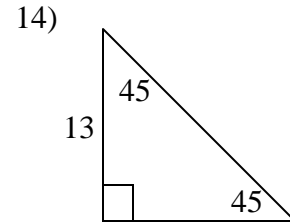
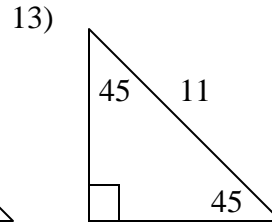
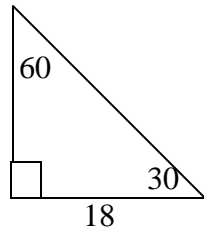
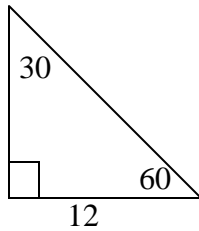
- 1)  $\sqrt{405}$       2)  $3\sqrt{27}$       3)  $-4\sqrt{176}$       4)  $14/\sqrt{7}$       5)  $21/\sqrt{3}$       6)  $10/\sqrt{5}$

**Find the geometric mean:**

- 7) 45 and 28      8) 95 and 112      9) 307 and 648      10) 223 and 706

**Find each of the missing sides:**

11) \_\_\_\_\_ 12) \_\_\_\_\_



**Draw a diagram and answer each of the following:**

16) One house is 12 miles east of a school. Another house is 9 miles north of the school. How far apart from each other are the houses?

17) A rectangle has sides of 17 and 12 meters. What is the length of a diagonal of the rectangle? (nearest tenth)

18) The hypotenuse of a right triangle is 26cm. The length of one leg is 10 cm. Find the length of the other leg.

**Prove whether the following are the sides of a right triangle:**

- 19) 17,45,51      20) 36, 38, 34      21) 9,40,41

**Answer each of the following. Provide your own diagram!!!:**

22) In right triangle ABC, CD is the altitude drawn to hypotenuse AB. The length of DB is five units longer than AD.

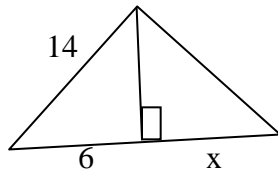
- a) If  $AD = x$ , write an expression for the length of DB, in terms of  $x$ .  
b) If  $CD = 6$ , find the length of DB.

23) In right triangle ABC, CD is the altitude drawn to hypotenuse AB. The length of AD is 30 units longer than DB.

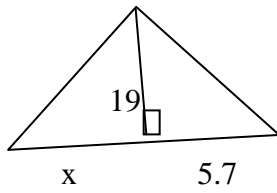
- a) If  $DB = x$ , write an expression for the length of AD, in terms of  $x$ .  
b) If  $CD = 8$ , find the length of AD.

**Find the value of x in each of the following:**

24)



25)



26)

