**1.**

36 inches

12 inches

a. What is the length of one riser? \_\_\_\_\_\_\_\_\_\_\_

b. What is the length of one tread? \_\_\_\_\_\_\_\_\_\_\_\_

c. What is the slope of one stair? \_\_\_\_\_\_\_\_\_\_\_

d. What is the slope of the entire set of stairs? \_\_\_\_\_\_\_\_\_

**Simplify. Show all work necessary for full credit.**

2.  = \_\_\_\_\_\_\_\_\_\_\_ 3.  = \_\_\_\_\_\_\_\_\_\_\_

4.  = \_\_\_\_\_\_\_\_\_\_\_ 5.  = \_\_\_\_\_\_\_\_\_\_\_

6.  = \_\_\_\_\_\_\_\_\_\_\_ 7.  = \_\_\_\_\_\_\_\_\_\_

8.  = \_\_\_\_\_\_\_\_\_ 9. =\_\_\_\_\_

10. Use factor trees to write each number as a product of primes:

a. 16 b. 38

**Simplify the following expressions**:

11.  12. 

**Solve the following equations:**

13.  14. 

b1 = 32 in.

b2 = 14 in.

h = 6 in.

.

.

15. Find the area using the formula: