Name:

Algebra

Section 4.2

**Find the area of the rectangle**

1. 5x

3x

**Write each expression in exponential form**

2. x \* x \* x \* x \* x 3. 4 \* t \* t \* t

4. -6 \* z \* z 5. -3 \* x \* 2 \* x

6. a \* a \* b \* b \* b 7. m \* 8 \* m \* n \* n

8. -3 \* x \* y \* x 9. e \* f \* e \* g \* g

**Match each phrase with the corresponding algebraic expression**

10. The square of a plus the square of b a. (a + b)3

b. a2 + b2

11. The cube of the quantity a plus b c. a3 + b3

d. (a + b)2

**Simplify**

12. a. -62 13. a. 2 \* 52

b. (-6)2 b. (2 \* 5)2

14. a. 5 – 34 15. a. 2 \* 3 – 52

b. (5 – 3)4 b. 2 \* (3 – 5)2

16. (1 \* 103) + (4 \* 102) + (9 \* 10) + 2 17. [23 + 33] ÷ [23 + (-1)2]