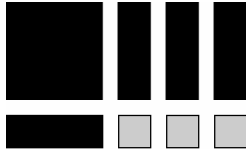Name: _____ Date: _____

Section 5.1 Extra Practice

1. Multiply using algebra tiles.

   a) $(x + 2)(x + 4)$

   b) $(x + 1)(x - 2)$

2. a) What product does the algebra tile model show?

   b) What are the dimensions of the model?

3. Multiply using the distributive property.

   a) $(x - 3)(x - 6)$

   b) $(y + 10)(y - 5)$

   c) $(2x + 3)(x - 4)$

   d) $(5 - 3a)(4 + a)$

   e) $3(x - 2y)(x + y)$

4. Multiply using the distributive property.

   a) $(x - 5)(x + 5)$

   b) $(m + 10)(m - 10)$

   c) $(2x + 3)(2x - 3)$

   d) $(4 - 3a)(4 + 3a)$

   e) $5(2x - y)(2x + y)$

5. Use the distributive property to determine each product.

   a) $(x + 4)^2$

   b) $(x - 7)^2$

   c) $(6 + y)^2$

   d) $(2x + 5y)^2$

   e) $2(2a + 3b)^2$

6. Use the distributive property to determine each product.

   a) $2x(x^2 + x - 1)$

   b) $3a(a^2 + 3a - 5)$

   c) $(x + 2)(x^2 - 2x + 5)$

   d) $(2a - 3)(3a^2 + 5a - 2)$

   e) $(x^2 + 2x - 1)(x^2 - 2x + 1)$

7. Multiply. Then, combine like terms.

   a) $(x + 2)(x - 3) - (x - 4)$

   b) $(x - 1)(x - 2) + (x + 1)(x + 2)$

   c) $(a - 3)^2 + (a + 4)(2a - 3)$

   d) $(y + 2z)(y + 10z) - (y - 5z)^2$

   e) $(2x + 3) - 4x(x + 4)(3x - 1)$

8. Multiply.

   a) $(x - 3y)^2(2x + y)$

   b) $(x + 3)^2(x - 3)$

   c) $(x - 2)^2(x + 1)^2$

   d) $(x - 3)^3$

   e) $(y + 4)^3$

9. Write an expression to represent the area of the figure.