**Academic Algebra 2**

**Review Exponents Test Chapter 5**

# 1. Simplify:

2. Simplify: 

# A.  B.  C.  D.

3. Find the expression that is not equivalent to.

# A.  B.  C.  D.

4. Simplify: 

**A.**  **B.** 

**C.**  **D.** 

5. Simplify: 

**A.**  **B.** 

**C.**  **D.** 

6. Simplify: 

**A.**  **B.** 

**C.**  **D.** 

7. Simplify: $\left(\frac{1}{4}x-\frac{2}{9}\right)\left(\frac{1}{4}x+\frac{2}{9}\right)$

8. Simplify: 

**A.**  **B.** 

**C.**  **D.** 

9. Simplify $3\left(x+10\right)²$ + (x – 8)²

Equations Review

Solve each:

10. 15 – 8x = 2(9x – 5)

11. $\frac{5}{2x-7}=\frac{-8}{3x+8}$

12. -2x + 3(x – 5) + $\frac{1}{66^{-1}}$ = .8 + 3.2 – 9x

13. Simplify: 4x²(x² + 5x – 9)

14. Simplify: $\frac{14x^{-7}w^{-8}}{21x^{-3}w^{10}}$

15. If a box has dimensions of 7x – 8 and 2x + 5, what is the area of the box? (in terms of x)

16. If a rectangular box has dimensions of 9x – 11 and 6 + x, what is x if the perimeter of the box is 30.