NAME: _____ WEEKLY REVIEW SHEET #25

DATE: _____ ALGEBRA

1 – 5 Multiple Choice. <u>SHOW ALL WORK.</u> (4 points each)

1. Which of the following is the positive solution of $7x - x^2 = -18$?
   a. 2 b. 3 c. 6 d. 9

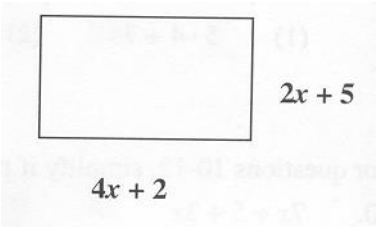
2. Given: $A = \sqrt{3}$ $B = 5\sqrt{2}$ $C = \sqrt{25}$ $D = \sqrt{1}$
   Which expression results in a rational number?
   a. $A + B$ b. $B + C$ c. $C + D$ d. $D + A$

3. $(3.8763 \times 10^{-5}) \div (5.345 \times 10^{-6})$ is approximately:
   a. 7.3 b. 0.073 c. 73 d. 730

4. Four expressions are show below:
   I. $2(3x^2 - 3x - 60)$
   II. $6x(x - 1) - 120$
   III. $6(x - 4)(x + 5)$
   IV. $6(x^2 - x - 20)$

   The expression $6x^2 - 6x - 120$ is equivalent to:
   a. I and II, only b. I, II, and IV
   c. II, III and IV d. II and IV, only

5. Write and simplify an expression for the perimeter of the figure.
   a. $(4x + 2) + (2x + 5); 6x + 7$
   b. $2(4x + 2) + 2(2x + 5); 12x + 14$
   c. $2(4x + 2) + 2(2x + 5); 12x + 7$
   d. $2(2x + 5) + 2(4x + 2); 10x + 11$



6. How do you know if an equation is a linear equation? A quadratic equation? ***(2 pts)***

7 – 9 Simplify. (3 points each)

7. $4 - 5(2a + 4) + a$

8. $\frac{24x^3+32x^2-4x}{4x}$

9. $(2x + 5)(x - 3)$

10. Solve: $\frac{3}{a+4} = \frac{a-1}{a}$ ***(5 points)***

11. Graph the following function. ***(4 points)***

$$-2x + y - 4 = x$$