**Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Per:\_\_\_\_\_\_\_\_\_\_\_\_**

**Midterm Review Warm Up 3**

**Section 3.1 Section 3.4**

**Ex:** Solve $-\frac{2}{7}x=16$ **Ex:** Solve: 4(3*x* – 3) = 6(2*x* – 5)

\*Multiply by the reciprocal 12*x* – 12 = 12*x* – 30

 $-\frac{7}{2}·-\frac{2}{7}x=16·-\frac{7}{2}$ −12*x* −12*x*

 *x* = −56 −12 = −30

 No Solution

**Ex:** Solve: 9(2*x* + 4) = 6(3*x* + 6) **Ex:** Solve: 4(2*x* + 5) = 10(3*x* + 2)

 18*x* + 36 = 18*x* + 36 8*x* + 20 = 30*x* + 20

 −18*x* −18*x* −8*x* −8*x*

 36 = 36 20 = 12*x* + 20

 Any number −20 −20

 0 = 12*x*

 12 12

 0 = *x*

**Section 3.5-3.6 Section 3.7**

**Ex:** Solve the proportion: **Ex:** What percent of 28 is 7?

 $\frac{2x+1}{3}=\frac{3x+5}{4}$

\*To solve a proportion, cross multiply to create an Use the percent proportion: $\frac{is}{of}=\frac{\%}{100}$

Equation $\frac{7}{28}=\frac{x}{100}$

 4(2*x* + 1) = 3(3*x* + 5) 700 = 28*x*

 8*x +* 4 = 9*x* + 15 28 28

 −8*x*  −8*x* 25 = *x*

 4 = *x* + 15

 −15 −15

 −11 = *x*

**Section 3.8**

**Ex:** Rewrite the equation in function form:

 2*x* – 3*y* = 8

 −2*x* −2*x*

 −3*y* = 8 – 2*x*

 −3 −3

 $y=-\frac{8}{3}+\frac{2}{3}x$