**Lab 1 for Section 6.2, 6.3, and 6.4** Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*Use good notation and show appropriate work. Write solutions to application problems in* ***complete sentences***.

1. (a) A gasoline can has a capacity of (b) Find the volume of a box that is  larger  
 2.5 gallons. How much is in the than a box with dimensions of 2.5 inches by 4.2  
 gas can when it is 70% full? inches by 12 inches.

(c) What percent of 28 is 4.2? (d) 3.9% of what number is 78?

2. Combine like terms.

(a) 0.34*a* + 5.6*b* – 7.4*a* + 9.25*b* – 12*a* (b) 

3. Solve each equation.

(a) 0.4*x* – 3.5 = 13.5 (b) 3.49*m* – 0.107 = 0.0928 + 3.22*m*

(c)  (d) 

4. Solve the formula *p* = 2*l* + 2*w* for *w*.

5. One number is eight more than three times another number. If their sum is decreased by eight, the result is also eight. Find the numbers.