1. Complete the table.

Expression	List the Terms	List the Factors	List the Variables	List the Coefficients	List the Constants
$3y^3 + 4y^2 - 7y + 1$					
$5x^4 - 9x^2$					
$-a^2 + 6a - 3$					
15					

- 2. Write an expression with exactly 5 terms, containing the coefficients 7, 21, -15, and 8. (Answers will vary.)
- 3. Simplify each expression (hint: combine "like terms").

a. 
$$5f + 8 - 13f$$

b. 
$$2x - 5x^2 + 3 + 4x$$

c. 
$$3x^2 + 6x - 2y + 4x^2 + 3y - x$$

$$d. 3(2x - 4) + 2x$$

e. 
$$-2(8y - 4) + 9y + 6$$

f. 
$$\frac{13+2(7x-3)}{7}$$

g. 
$$-(12-4x) + 8(10-x)$$

h. 
$$7(2x-4) - (10-3x)$$

i. 
$$\frac{6x+9}{3} - 5 + 4(-x-3)$$

4. Give an example of  $\underline{\text{two}}$  like terms and  $\underline{\text{two}}$  unlike terms. Explain why they would or would not be classified as like terms.

<u>Like</u> <u>Unlike</u>

5. Stretch your thinking - Simplify the following expression: 5(x-4) - (2x-7) + x - 2(x+3)