Name:_____   Date:_____

HW Section 5.2 Like terms and Unlike Terms

1. Indicate whether if each of the following pairs are like terms or not:
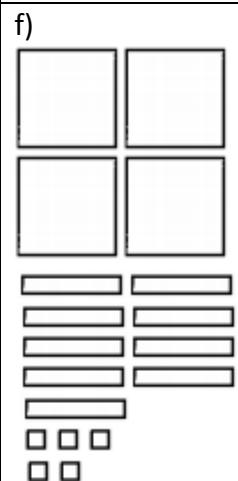
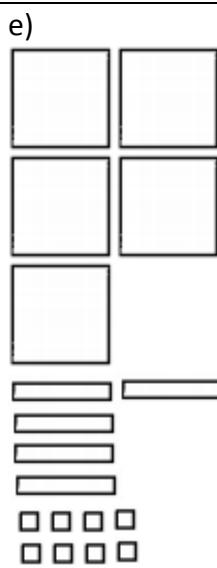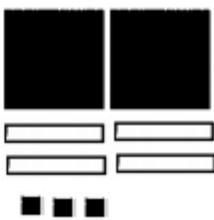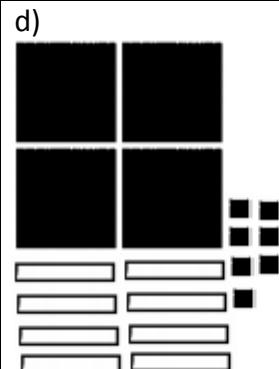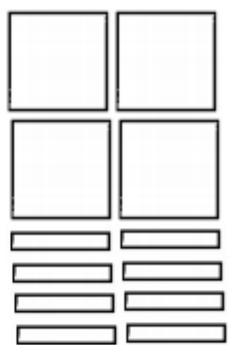|				
a) $7a$ & $-15a$	b) $8xy$ & $3yx$	c) $9a$ & $6a^2$	d) $2ab$ & $13ba^2$	e) $7x^2$ & $7x^3$
f) $3cab^2$ & $-4ab^2c$	g) $8xy$ & $\dfrac{12}{xy}$	h) $15nm^2$ & $9mn^2$	i) 3^4zy^3 & 3^2y^3z	j) $8x^2$ & $3x(x)$

2. From the list of terms, indicate which ones are like terms with each other:

a) $\sqrt{9}, 9x^3, 8x, 22x^2, 12x, 15$	b) $\sqrt{3}x^2, 9x^3, 2x, 6x^2, 8x$
c) $12b^2, 8ab, 9b, 13ba, \sqrt{2}b^2$	d) $5x^2, \sqrt{7}yx, 12x^2, \sqrt{3}xy, \sqrt{2}x(3x)$

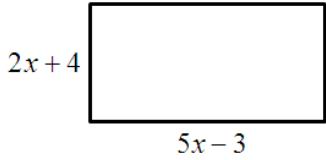3. Simplify each of the following below:

a)	b)

c)

d)

e)

f)
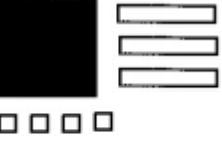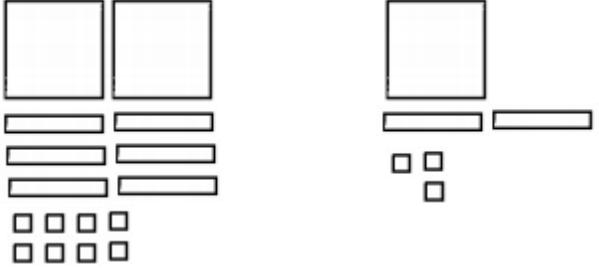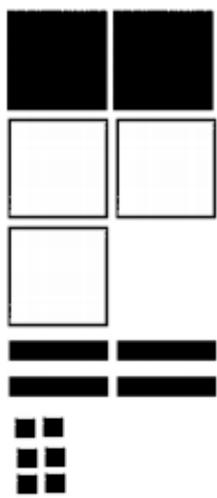
4. Simplify each of the following below:

a) $-5k + 6k + 12k$	b) $8y + 5z - 3y + 4z$

c) $5x^2 - 6x - 3x^2 + 14x$	d) $5x - 9y - 12 + 2x + 5y - 8$
e) $6m^2 - 5m + 9 + 2m^2 + 7 - 6m$	f) $4x^2y - 6xy^2 + 7xy - 12xy + 10xy^2 - 15x^2y$
g) $-5xy - 8xy^2 + 7yx - 12xy + 11xy^2 - 5x^2y$	h) $-8x^2y^3 - 6x^3y^2 + 9xy - 12yx + 13x^3y^2 - 15x^2y^3$

5. Write an expression for the perimeter of the figure below.

$2x + 4$

$5x - 3$

6. Determine the perimeter of the figure below.

x

$2x$

$x+3$

$2x+5$

$5x - 4$