Student Name:

Simplifying Expressions Worksheet

Directions: Answer each question below, showing all pertinent work.

1. Simplify each of the following expressions.

a. −3(x + 3) + 4x	b. d + 3cd − 7c + 3cd + 2c
c. xy + 4x − 3xy − x	d. ab − 2ac + cb
e. 4t + 10t	f. −4(5x)
g. −10x − x	h. 4 + 7(x + 3)
i. 5(−2xy)	j, −k + 3(4k −1) + 2
k. 6(−2y) − 9 + 4(−2y + 6)	l. 5(b − 4) + 12

2. Explain and correct the error made by a student who simplified this expression.

$$-2x + 7x + 8$$
$$(-2 + 7 + 8)x$$
$$13x$$

3. Explain and correct the error made by a student who simplified this expression.

$$-2 + 7(x + 8)$$
$$5(x + 8)$$
$$5x + 40$$

4. Explain and correct the error made by a student who simplified this expression.

$$-2x - 4x + 8y - y$$
$$(-2 - 4)x + (8 - 0)y$$
$$-6x + 8y$$