Name: _____ Date: _____

BLM 7–2

Chapter 7 Prerequisite Skills

Show all your work.

1. Find the least common denominator for the fractions in each set.

a) $\frac{1}{4}, \frac{5}{6}$

b) $\frac{1}{5}, \frac{3}{10}$

c) $\frac{2}{3}, \frac{1}{2}$

d) $\frac{5}{6}, \frac{7}{18}$

e) $\frac{1}{10}, \frac{1}{6}$

f) $\frac{3}{4}, \frac{5}{8}, \frac{1}{16}$

g) $\frac{1}{3}, \frac{4}{5}, \frac{7}{12}$

h) $\frac{5}{6}, \frac{1}{2}, \frac{2}{9}$

2. Simplify. Use integer rules when they help.

a) $5 + (-3) - (-5) + (+3) - 6$

b) $1 - (-2) + (-2) - 4 + 2$

c) $-3 - (-1) + (-4) + 5 + 3 - 4$

d) $-3 + 5 + (-1) + 2 - 4 - 2$

e) $2(3 + 4) - 3(7 + 2) + (-2 + 5)$

f) $-4(1 - 4 + 5) - (4 + 3 - 1)$

3. Simplify.

a) $4 + 4r - z + 3r + 5z - 2$

b) $7y - 3 + 2y$

c) $2 + 3r - 5 + r$

d) $3x + 3y - 2x + 4$

e) $k - 5t - 6k + 2$

f) $4t - (-2t) + (4 - 7t) + 7 - 7t + 11$

g) $3x - y + z - 2y + 3x - 7y - 7z + 2y$

h) $3q - 2p + 4 - 5 + 6p - 2q - (-3q)$

4. Expand and simplify.

a) $3(x + 2)$

b) $2(q + 3) + 11q$

c) $8(4 - p) - 3(p + 5)$

d) $5(k - 1) + 3(2k - 2)$

e) $-2(e - 7) - 4(-3e + 5)$

f) $4(3k + 7) - 2(2 - 4k)$

g) $2(x + 4) - 3(3x - 4)$

h) $3(5r - 3) - 4(2r - 5)$

5. Evaluate each expression for $x = 2$ and $y = -1$.

a) $4x + 3y$

b) $-7y$

c) $2x + 3y$

d) $2xy + 3yx - y$

e) $xy - xy + 2x - 2y + 3xy$

f) $\frac{3x + y}{5} + \frac{2x + y}{2}$

6. Use algebra tiles to model each equation.

a) $3x - 4 = 8$

b) $x - 1 = 5$

c) $12 = 4 + k$

d) $11 = 3r - 4$

e) $3z + 11 = 17$

f) $6 - 2a = -2$