Name: _____

1. Expand the following algebraic expressions.

(a) $3(5x + y)$

(b) $4(a - 6)$

(c) $2(7m - 3n)$

(d) $-3(a + b)$

(e) $-2(6 - m)$

(f) $-4(5p - 2q)$

(g) $3(2a + 3b - 5c)$

(h) $-5(x - 4y - 7z)$

2. Expand the following algebraic expressions.

(a) $x(2x + 7)$

(b) $a(4 - b)$

(c) $m(m - 3n)$

(d) $-a(a + 3b)$

(e) $-2x(6x - y)$

(f) $-4p(5p - 2q)$

(g) $3a(2a + 5b - 3c)$

(h) $-5y(x - 4y - 7z)$

3. Expand the following algebraic expressions and simplify by collecting like terms

(a) $2(x + 3) + 4(x + 5)$

(b) $3(a + 2) + 5(a - 4)$

(c) $2(3m + 4) - 4(2m - 1)$

4. Expand the following algebraic expressions and simplify by collecting like terms

(a) $2x(x + 5) + 3x(x + 2)$

(b) $3n(n - 4) + 5n(2n - 4)$

(c) $4m(3m + 2) - 4(2m - 1)$

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

5. Expand the following algebraic expressions and simplify by collecting like terms

(a) $(x + 5)(x + 3)$

(b) $(n + 4)(2n - 3)$

(c) $(3m - 2)(2m + 5)$

(d) $(2x + 3y)(3x + y)$

(e) $(3m - 4)^2$

(f) $(2x + 3y)^2$