M9 - 5.1 - Combining Like Terms WS

Combine the like terms

$x + x =$ $x + 2x =$ $2a + 4a =$ $3x - 2x =$

$5a - 2a =$ $6a - a =$ $n + 3n =$ $2x + 3x =$

$a + a =$ $-5m - 2m =$ $3z + 5z =$ $5nj - 8nj =$

$2y + y =$ $2x - x =$ $2x^2 - x^2 =$ $w^2 - 2w^2 =$

$x^2 + x^2 =$ $x^2 + 2x^2 =$ $2y^2 + 3y^2 =$ $5a^2 - a^2 =$

$xy + 2xy =$ $x^2 - x =$ $m^2 + m =$ $x - 2 =$

$4y - 2y =$ $3y^2 + y^2 =$ $-3x + 5x =$ $y^2 + 4y =$

Circle, square, or cloud, then combine like terms.

$2 + x + 3 =$ $2 - x - 3 =$ $3n + n - 2n =$

$3 + x + 6 =$ $n - 4 + 2 =$ $4 - 2 - x^2 =$

$y^2 + 4x - x =$ $2x + 1 - 3x =$ $x - 3 + 2 =$

$4x^2 + 3x + 2x =$ $5x - 2 + x - 3 =$ $2x + 5 - 4x + 2 =$

$3x - 3 - x + 5 =$ $x^2 + 2x^2 + 3x + 2x =$

$y + 2y + 3 + 5 + y =$ $y + x + 5y + 3x =$

$m^2 - 5 + 3 + 2m^2 =$ $2x + 3 + x + 5 - 7 =$

$-5x^2 - 4x + 6 + x =$ $-x^2 + 3 - 2x^2 - x =$

$3x^2 + 2x + 2 + 3x + 5 + x^2 =$ $-3x^2 - 4x + x^2 - 2x + 4 =$

M9 - 5.2 - Multiplying Monomials

Multiply the following polynomials.

$6 \times 2a =$ $5m \times 2m =$ $3x^2 \times 6 =$ $3x \times -4x =$

$-4 \times 3m =$ $-5n \times -2n =$ $(-5x) \times (3x) =$ $-5 \times (-2m) =$

$2x \times 3x^2 =$ $-5x^3 \times 2x^2 =$ $x^2 \times x^2 =$ $x^3 \times 3x^2 =$

$a \times a =$ $m \times m =$ $n \times n =$ $k \times k =$

$a \times a \times a =$ $m \times m \times m =$ $h \times h \times h =$ $yz \times yz \times yz =$

$2a \times a =$ $5m \times m =$ $j \times 7j =$ $x \times x^2 =$

Distribute the following Monomials

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

$-3(2a) =$ $-2a(-3) =$ $-5x(-2x) =$ $-2x(5x) =$

$ab(2a^2) =$ $b^2(-ca) =$ $x^2(-x) =$ $-x^2(2x) =$

$3ab^2(2b) =$ $2ab^3(ab^2) =$ $-2a^2b(-b^2) =$ $-(3)(2x^2) =$

$s^2\ t^2(3t) =$ $mn(-2mn)(-1)$ $4r^2(r) =$ $2xy(2xz) =$

M9 - 5.2 - Distribution a(x+b), a(bx+c), ax(bx+c) HW

Distribute the following by multiplying the number in front/behind of the brackets by both numbers inside the brackets.

$2(x + 5) =$

$5(3 - x) =$

$-3(x + 7) =$

$4(x + 5)$

$-9(x + 3) =$

$(x - 2)7 =$

$6(3x + 4) =$

$-4(7x + 4) =$

$-2(9x + 11) =$

$-8(3x - 7) =$

$(6x - 9)3 =$

$5(3x - 8) =$

$x(3x + 7) =$

$4x(x - 2) =$

$(7x - 3)x =$

$3x^2(3x - 5) =$

$-7x(3 + 8x) =$

$5x(6x - 3x) =$

$-2(4x^2 + 8x - 2)$

$6(2x^2 - 4x + 1) =$

$9(2x^2 + 3x + 4) =$

$7x(2x^2 + 5x + 7) =$

$-(4x^3 + 3x)2x =$

M9 - 5.3 - Dividing Monomials

Divide the following polynomials.

$6a \div 2 =$

$8m \div 2m =$

$9x^2 \div 3 =$

$12x \div -4x =$

$-6m \div 3 =$

$-10n \div -2n =$

$(-15x) \div (3x) =$

$-8m^2 \div (-2m) =$

$18x^3 \div 3x^2 =$

$-4x^3 \div 2x^2 =$

$x \div x =$

$\frac{6a}{2} =$

$\frac{5}{5} =$

$\frac{1}{1} =$

$\frac{6x}{2x} =$

$\frac{4a^2}{a} =$

$\frac{6a^2}{2a} =$

$\frac{a}{a} =$

$\frac{x^4}{2x^2} =$

$\frac{12x^3}{4x^2} =$

$\frac{-4x}{-10x^2} =$

$\frac{2a}{3a^2} =$

$\frac{15st^2}{t} =$

$\frac{4st}{-6st} =$

$\frac{-2st^2}{4s^2t^2} =$

$\frac{10b^2c}{5c^2} =$

$\frac{3x^2}{15y} =$

$\frac{24x^2y^3}{16x^3y} =$

$\frac{ab^2}{-3ac} =$

$\frac{-2x^2}{-x} =$

$\frac{-2x}{x^2} =$

M9 - 5.3 - Dividing Polynomials WS

Separate into an addition/subtraction of fractions and simplify.

$\frac{4x + 2}{2} = \frac{4x}{2} + \frac{2}{2} = 2x + 1$

$\frac{6x - 3}{3} =$

$\frac{-5x + 10}{2} =$

$\frac{4x + 2}{-2} =$

$\frac{6x - 3}{-3} =$

$\frac{-5x + 10}{-2} =$

$\frac{-6x - 6}{3} =$

$\frac{5x - 10y}{5} =$

$\frac{6x + 8y}{-2} =$

$\frac{4x^2 - 8x - 16}{4} =$

$\frac{6x^2 - 12x + 18}{-6} =$

$\frac{-5x^2 - 10x + 20}{-5} =$

$\frac{5x^2 - 10xy + 20}{-5x} =$

$\frac{5x^2 + x}{x} =$

$\frac{3x^2 - x}{x} =$

$\frac{-5x^2 - 3y}{x} =$

$\frac{4x^2 + 2x}{-x} =$

$\frac{8x^2 + 4x}{2x} =$

$\frac{-9x - 3y}{3x} =$

$\frac{-10x^2 - 5x}{-5x} =$

$\frac{10x^2 - 7x}{5x} =$

$\frac{9x^3 + 6x^2 - 3x}{3x} =$

$\frac{3x - 6}{x^2} =$

$\frac{5x - 7}{-2x} =$

$\frac{30x^2 - 20xy + 15y^2}{x} =$

$\frac{2x^2 - 6xy + 4y^2}{2y^2} =$

$\frac{3xy - 4x + 5x^2}{-x} =$

$\frac{5ab - 10b^2 + 3a}{ab} =$