4.1 Simplifying Polynomials

Ex. 1 a) $3x + 4x - 7x + 9x$

$= 7x - 7x + 9x$

$= 0 + 9x$

$= 9x$

b) $+1(2x - 3) + 1(5x - 8)$

$= 2x - 3 + 5x - 8$

$= 7x - 11$

Coefficient

-11
$+(-11)$

$-3 - 8$
$= -11$

c) $1(2x^2 + 7x + 5) - 1(4x^2 - 2x + 7)$

$= 2x^2 + 7x + 5 - 4x^2 + 2x - 7$

$= -2x^2 + 9x - 2$

p257 #6 - 8

Simplify

p.257 #6b)

$= 1(5x+6) + 1(2x-8)$

$5x + 6 + 2x - 8$

$= 7x - 2$

$6 - 8 = -2$

$6 + (-8) = -2$

p257 #6e)

$1(2y^2 - 3y + 4) + 1(-5y^2 + 5y - 3)$

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

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

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

Day 1 - homework help - solutions

p257 #4k) $\frac{3w^2}{4} - \frac{2w^2}{3} + \frac{1}{2}w^2 - \frac{4w^2}{3}$

$= \frac{3w^2}{4} - \frac{6}{3}w^2 + \frac{1}{2}w^2 = \frac{3w^2}{4} - 2w^2 + \frac{1}{2}w^2$

$-\frac{2}{1w} = -\frac{2}{4}$

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

lowest common denominator = 4

$= \frac{3w^2}{4} - \frac{8w^2}{4} + \frac{2w^2}{4}$

$= \frac{3w^2 - 8w^2 + 2w^2}{4}$

$= \frac{-3w^2}{4}$

$-\frac{9w^2}{12} = \frac{-3w^2}{4}$ (÷3)

p.257. #4i) Simplify

$3m^3 - 2m^3 + 4m^3$

$= 5m^3$