

(1) Complete the missing expressions:

(a)  $(\underline{5x} - \underline{3}) + (\underline{3x} + \underline{4}) = \underline{8x} + \underline{1}$

$\underline{5x + 3x = 8x} \quad \text{and} \quad \underline{-3 + 4 = 1}$

(b)  $(\underline{5x} - \underline{5y}) + (\underline{-x} + \underline{2y}) = \underline{4x} - \underline{3y}$

$\underline{5x + (-x) = 4x} \quad \text{and} \quad \underline{-5y + 2y = -3y}$

(c)  $(\underline{4x} - \underline{7}) - (\underline{x} - \underline{0}) = \underline{3x} - \underline{7}$

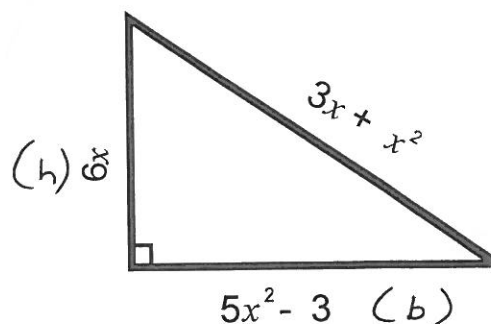
$\underline{4x - x = 3x} \quad \text{and} \quad \underline{-7 + 0 = -7}$

(2) The sum of the two expressions is  $4m^3 - 2n$ . If the one expression is  $2n^2 + 6m^2 - 1$ , Determine the other expression.

$\underline{(4m^3 - 2n) - (2n^2 + 6m^2 - 1)}$

$\underline{= 4m^3 - 2n - 2n^2 - 6m^2 + 1}$

(3) Determine the area of the triangle in terms of  $x$ .



$\underline{\text{Area} = \frac{1}{2} b \times h}$

$\underline{= \frac{1}{2} (5x^2 - 3)(6x)}$

$\underline{= \frac{1}{2} (6x)(5x^2 - 3)}$

$\underline{= 3x(5x^2 - 3)}$

$\underline{= 15x^3 - 9x}$

(4) If  $K = 3x^2 - 3x + 6$ , determine  $K - 12$ .

$$\begin{aligned} & K - 12 \\ &= (3x^2 - 3x + 6) - 12 \\ &= 3x^2 - 3x + 6 - 12 \\ &= 3x^2 - 3x - 6 \end{aligned}$$

(5) Which of the following statements is not true? Correct the incorrect statement(s).

(a)  $mn(n - 3m) = mn^2 - 3m^2n$

$$\begin{aligned} \text{LHS} &= mn(n - 3m) \\ &= mn^2 - 3m^2n \\ &\text{True!} \end{aligned}$$

(b)  $(-4a^2b)^2 = 16a^4b$

$$\begin{aligned} \text{LHS} &= (-4a^2b)^2 \\ &= (-4)^2 a^4 b^2 = 16a^4 \underline{b^2} \\ &\text{False!} \end{aligned}$$

(c) As  $x = -3$  en  $y = 3$ , dan is  $-3x^2y = 243$

$$\begin{aligned} \text{LHS} &= -3x^2y \\ &= -3(-3)^2(3) \\ &= -3(9)(3) \\ &= -81 \neq 243 \end{aligned}$$

False!