

Worksheet 2015-8 ED-00005(2)

(1) Determine the sum of the following expressions:

(a) $4p + 3q^2 - 1$; $p^4 - 3q^2 + 6$; $17 + p - 2p^4$

(b) $\frac{4x^6 - 12x^3 + 8x^2}{2x}$ and $6x^2 - 4x - 2x^5$

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

(a) $-x^2 + 1 = 1 - x^2$

(c) $3x + 5x = 8x^2$

(3) Simplify as far as possible:

(a) $3xy + 3x - y - 4xy$

(b) $-9m - 3m + m - 6mn$

(c) $4x(3y - 2x)$

(d) $k^2 p(4k^3 + p^2)$

(e) $\frac{4n^3 - n(n^4)}{n^2}$

(f) $5 + 3(k - 2)$

(4) Calculate the value(s) of P if $P = 3x - y^2$ with $x = 2$ and $y \in \{-2 ; 0 ; 3\}$
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(5) Complete the following tables and write a relation between x and y :

(a)

x	-2	-1	0			7
y	5	2	1	10	17	

(b)

x			2	4	6		11
y	-11	-7	-5	-3		0	4

(6) If $k = 0$; $x = -3$ and $y = 2$, calculate the value of:

(a) xyk

(b) $3y - 2x$

(c) yx^k

(d) $x^y \cdot y^x$
