

INTENSIVE MATHEMATICS (PBM1035)

Session December 2017

SELF-EXERCISE 6

Instructions

- Answer ALL questions. Write your answers in the spaces provided.
- Show your working. You may use a non-programmable scientific calculator.

1. Evaluate each using the values given.

(a) $p + 1 + q - m$; $m = 1, p = 3, q = 4$

(b) $\frac{6+z-y}{3}$; $y = 1, z = 4$

(c) $3 + z - 1 + y - 1$; $y = 5, z = 4$

(d) $k \times 3^2 - (j + k) - 5$, $j = 4, k = 5$

2. Combine like terms.

(a) $r - 9 + 10$

(b) $x - 10 - 6x + 1$

(c) $m - 2m$

(d) $-8p + 5p$

(e) $1 - r - 9$

(f) $-4b + 9b$

(g) $9n - 1 + n + 4$

3. Distribute.

(a) $-8(x - 4)$

(b) $8n(n + 9)$

(c) $7k(-k + 6)$

(d) $-8n(5 + 10n)$

(e) $-9b(b - 10)$

(f) $4(8n - 2)$

(g) $-(-5 + 9a)$

4. Simplify.

(a) $4v - 7(1 - 8v)$

(b) $-8x + 9(-9x + 9)$

(c) $-9 - 10(1 + 10a)$

(d) $-2(4 + a) + 6a(9a + 10)$

(e) $-7(4x + 3) - 10(10x + 10)$

(f) $(5p - 6) + (1 - p)$

(g) $2n(-10n + 5) - 7(6 - 10n)$