

1. Simplify the following: (7 marks)

(a)  $(2b^2)(3b^5)$

(b)  $\frac{12a^4b^5}{3a^3b^2}$

(c)  $\frac{(2n^2m)^3(3nm)}{6n^3m^2}$

2. Simplify the following and collect “like” terms where possible: (6 marks)

(a)  $(3x^2 + 5x - 7) + (8x^2 - 9x + 1)$

(b)  $(-x^2 + 6x - 2) - (-3x^2 - 9x + 7)$

3. Expand and simplify the following: (12 marks)

(a)  $3(x+5) - (x-4)$

(b)  $a^2(3a-4)$

(c)  $2x(x^2-5) + 4(x^3-3x)$

(d)  $3x(x^2-5x+2) - x(7x^2-5x+2)$

4. Expand and simplify the following: (10 marks)

(a)  $(2x+3)(3x-1)$

(b)  $4(x+3)^2$

(b)  $(x+2)(x^2-5x+1)$