

Quiz 2

#1

$$p = 2x - 6, \quad q = x - 1$$

$$(a) \quad p + q = (2x - 6) + (x - 1) = \\ (2x + x) - 6 - 1 = 3x - 7$$

$$(b) \quad p \cdot q = (2x - 6)(x - 1) = \\ 2x^2 - 2x - 6x + 6 = 2x^2 - 8x + 6$$

#2

$$p = x^3 - 2x^2 + 3x - 6, \quad q = x + 2$$

$$(a) \quad p - q = (x^3 - 2x^2 + 3x - 6) - (x + 2) = \\ x^3 - 2x^2 + 2x - 8$$

$$(b) \quad p \cdot q = \cancel{2x^3} - \cancel{4x^2} + \cancel{6x} - \cancel{12} \\ + x^4 - \cancel{2x^3} + 3x^2 - \cancel{6x} = \\ x^4 - x^2 - 12$$