N+A+M+E=_____

Test # 2A-Polynomials

Content	Communication	Overall
41	4	

Part A (18 marks) – Attempt all questions before moving on to Part B

1. Simplify. [3]

a) $(y^8)(y^2)$ b) $(x^2)^3$ c) $\frac{w^7}{w^6}$

2. Simplify. [6]

a) 5x- 3x b) 6a + 3b + a + 5b c) 2(x + y)

d) $(5x^2 + 8x – 2) + (4x^2 - 5x - 3)$ e) $6x^3 - (-3) + 4x + (-4x^3) + x + 1$

3. Given the polynomial $3x^2-4x- 6$ [3]

a) How many terms does it have? _____ b) What is the constant? _____

c) Name the polynomial. _____

4. Simplify. Don't leave negative exponents [6]

a) $\frac{x^7y^6}{x^3y}$ b) $(-3a^5b^2)(5ab^3)$ c) $\frac{18w^3z^5}{3w^2z^3}$

5. Simplify. Show steps for full marks. [6]

a) 2(a-2) + 5(a + 3) b) 3x(x+2) c) $(w^2 - w – 3) – (2w^2 – 4w + 1)$

Part B (23 marks) Show your work for full marks.

6. A friend has a different answer than you do. They show you, their work. Circle the errors. Correct the errors and explain what they did wrong. [4]

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

$$= \frac{-8a^7}{3a^5}$$

$$= -5a^2$$

7. Simplify. Remember to show all work. [10]

a) $(-2xy^3)^3\ (3x^3y^4)^2$

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

c) $\frac{(3a^{-4}b)(8b^5)}{2a^{-2}b^3}$

d) $\frac{(2x^2y)(-3xy^3)^3}{(3xy^5)^2}$

8. Simplify [6]

a) $-5x(2x - 3x^3)$

b) $2[x + 3(2x - 4)]$

9. Find the missing side given the **perimeter** of the rectangle is 10x +6 cm. Show all your work. [3]