11.1-2 RWS Mathematician: _____

#1-6, Rewrite the polynomial in standard form, then classify each polynomial by degree AND number of terms.

1. -3 – 60x

2. -7

3. $13ab^3c^2$

4. $16 – 4x + 3x^2 – x^4$

5. $4a^2 – a^3b^4 + 11ab$

6. $4 – 5x + 3x^5 – 2x^2$

7. Write an example of a cubic binomial

#8-17, Perform the indicated operation with the polynomials

8. $(2x – 8x^2 -3) + (x^2 – 2x + 4)$

9. $(-3y + 2) + (y^2 + 8y + 2)$

10. $(-4x^3 – 2x^2 + x – 5) + (2x^3 + 3x + 4)$

11. $(z^3 + z^2 + 1) – z^2$

12. $(3x^3 – 4x^2 + 3) – (x^3 + 3x^2 – x – 4)$

13. $10 – (f^2 + 5)$

14. $(-2y^3 + 5y^2 –y + 8) + (-2y^3 + 4 + 3y)$

15. $(5w^2 + 15w – 7) – (15w + 5w^3)$

16. $(6x – 5) – (8x + 15) + (3x – 4)$

17. $-(5k^2 -1) – (-3k^2 + 5) – (k^2 – k)$

#18-19, Fill in the underlined portion of problem.

18. $(4x^2 + x – 5) +$ (_____) $= x^2 + 5x + 1$

19. $(3w^2 + 7w – 9) –$ (_____) $= 12w^2 – w + 6$