Kuta Software - Infinite Algebra 2 Name_____

The Binomial Theorem

Date_____ Period____

Find each coefficient described.

1) Coefficient of x^2 in expansion of $(2 + x)^5$

2) Coefficient of x^2 in expansion of $(x + 2)^5$

3) Coefficient of x in expansion of $(x + 3)^5$

4) Coefficient of b in expansion of $(3 + b)^4$

5) Coefficient of x^3y^2 in expansion of $(x - 3y)^5$

6) Coefficient of a^2 in expansion of $(2a + 1)^5$

Find each term described.

7) 2nd term in expansion of $(y - 2x)^4$

8) 4th term in expansion of $(4y + x)^4$

9) 1st term in expansion of $(a + b)^5$

10) 2nd term in expansion of $(y - x)^4$

Expand completely.

11) $(2m - 1)^4$

12) $(x - y)^3$

13) $(x^4 - y)^5$

14) $(2x^3 + 1)^5$

15) $(y - x^2)^3$

16) $(y^3 - 4x)^3$