Name_____

2.2 Biomial Theorem Day 2

Find each term described.

1) x^5 term in expansion of $(3x - 1)^{12}$

$-192456x^5$

2) x^2 term in expansion of $(x + 2y)^4$

$24x^2y^2$

3) x^3 term in expansion of $(2x - 2)^7$

$4480x^3$

4) x^6 term in expansion of $(x - 2)^{13}$

$-219648x^6$

5) x^2 term in expansion of $(4x + y)^{12}$

$1056x^2y^{10}$

6) x^4 term in expansion of $(2x - 1)^5$

$-80x^4$

7) x^8 term in expansion of $(3x - 1)^{13}$

$-8444007x^8$

8) x^3 term in expansion of $(x - 2)^5$

$40x^3$

9) x^4 term in expansion of $(x + y)^5$

$5x^4y$

10) x^4 term in expansion of $(2x + 1)^{10}$

$3360x^4$

Expand completely.

11) $(b + 2)^4$

$b^4 + 8b^3 + 24b^2 + 32b + 16$

12) $(x - 2y)^6$

$x^6 - 12x^5y + 60x^4y^2 - 160x^3y^3 + 240x^2y^4 - 192xy^5 + 64$

13) $(b + a)^4$

$b^4 + 4b^3a + 6b^2a^2 + 4ba^3 + a^4$

14) $(y + 3)^3$

$y^3 + 9y^2 + 27y + 27$

15) $(2a - 1)^6$

$64a^6 - 192a^5 + 240a^4 - 160a^3 + 60a^2 - 12a + 1$

16) $(y - 2)^6$

$y^6 - 12y^5 + 60y^4 - 160y^3 + 240y^2 - 192y + 64$

17) $(y + x)^3$

$y^3 + 3y^2x + 3yx^2 + x^3$