Algebra 2

Binomial Expansion Practice

Name_____

Date_____ Block_____

Find each term described.

1) 3rd term in expansion of $(y + 5)^3$

2) 4th term in expansion of $(u + 3)^4$

3) 3rd term in expansion of $(x + 2)^3$

4) 4th term in expansion of $(3 + v)^4$

5) 2nd term in expansion of $(2 + y)^6$

Expand completely.

6) $(v - 2u)^6$

7) $(u - 5)^3$

8) $(y + 4x)^3$

9) $(n + m)^4$

10) $(2y - 1)^6$

11) $(2y - x)^3$

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

Answers to Binomial Expansion Practice

1) $75y$ 　　　　　　　　2) $108u$ 　　　　　　　3) $12x$ 　　　　　　　4) $12v^3$

5) $192y$

6) $v^6 - 12v^5u + 60v^4u^2 - 160v^3u^3 + 240v^2u^4 - 192vu^5 + 64u^6$

7) $u^3 - 15u^2 + 75u - 125$ 　　　　8) $y^3 + 12y^2x + 48yx^2 + 64x^3$

9) $n^4 + 4n^3m + 6n^2m^2 + 4nm^3 + m^4$

10) $64y^6 - 192y^5 + 240y^4 - 160y^3 + 60y^2 - 12y + 1$

11) $8y^3 - 12y^2x + 6yx^2 - x^3$

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