

Assignment: Binomial Theorem

Date _____

Expand completely.

1) $(5y + x)^3$

2) $(v + 2u)^4$

3) $(y + 3x^2)^4$

4) $(x + 3y^2)^3$

Find each term described.

5) 1st term in expansion of $(a - b)^4$

6) 5th term in expansion of $(a + 4b)^4$

7) 4th term in expansion of $(u - 3v)^4$

8) 3rd term in expansion of $(b - 5a)^3$

9) 4th term in expansion of $(x + 3)^4$

10) 4th term in expansion of $(5y - x)^3$

11) 1st term in expansion of $(x - 2)^3$

12) 4th term in expansion of $(5n^3 - 1)^3$

Answers to Assignment: Binomial Theorem

- 1) $125y^3 + 75y^2x + 15yx^2 + x^3$ 2) $v^4 + 8v^3u + 24v^2u^2 + 32vu^3 + 16u^4$
3) $y^4 + 12y^3x^2 + 54y^2x^4 + 108yx^6 + 81x^8$ 4) $x^3 + 9x^2y^2 + 27xy^4 + 27y^6$
5) a^4 6) $256b^4$ 7) $-108uv^3$ 8) $75ba^2$
9) $108x$ 10) $-x^3$ 11) x^3 12) -1

