

Assignment : Binomial Theorem

Date _____

Find each coefficient described.

1) Coefficient of x^3 in expansion of $(2 + x)^5$

2) Coefficient of n in expansion of $(3 + n)^4$

3) Coefficient of y^3x^9 in expansion of $(y^3 - 3x^3)^4$

4) Coefficient of u^9v^2 in expansion of $(u^3 - 3v)^5$

5) Coefficient of $b^{12}a^4$ in expansion of $(b^4 - 3a^2)^5$

6) Coefficient of a^3b^4 in expansion of $(3a - 4b^4)^4$

Find each term described.

7) 6th term in expansion of $(y + 2x^3)^5$

8) 2nd term in expansion of $(a^4 - 3b^2)^5$

9) 4th term in expansion of $(m^2 + 2n^2)^5$

10) 4th term in expansion of $(4v - u^2)^4$

Answers to Assignment : Binomial Theorem

1) 40

5) 90

9) $80m^4n^6$

2) 108

6) -432

10) $-16vu^6$

3) -108

7) $32x^{15}$

4) 90

8) $-15a^{16}b^2$

