

Binomial Theorem

Find each term described.

1) 1st term in expansion of $(5b + a)^3$

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

3) 4th term in expansion of $(2x - 4y)^4$

4) 1st term in expansion of $(4 + b)^3$

5) 3rd term in expansion of $(2u + 1)^3$

6) 3rd term in expansion of $(2b - 1)^3$

Expand completely.

7) $(3 - y)^3$

8) $(2x + 1)^3$

9) $(x + y)^3$

10) $(5x - 1)^3$

11) $(a - 3)^3$

12) $(4 + y)^4$

13) $(1 - 3a)^4$

Find each term described.

14) 4th term in expansion of $(n + m)^3$

15) 6th term in expansion of $(x + 2)^7$

16) 7th term in expansion of $(2x + 1)^7$

17) 3rd term in expansion of $(4 - y)^4$

18) 3rd term in expansion of $(b - 5a)^3$

19) 3rd term in expansion of $(y - x)^3$

20) 1st term in expansion of $(5y - 4x)^3$

Answers to Binomial Theorem

1) $125b^3$

2) $4uv^3$

3) $-512xy^3$

4) 64

5) $6u$

6) $6b$

7) $27 - 27y + 9y^2 - y^3$

8) $8x^3 + 12x^2 + 6x + 1$

9) $x^3 + 3x^2y + 3xy^2 + y^3$

10) $125x^3 - 75x^2 + 15x - 1$

11) $a^3 - 9a^2 + 27a - 27$

12) $256 + 256y + 96y^2 + 16y^3 + y^4$

13) $1 - 12a + 54a^2 - 108a^3 + 81a^4$

14) m^3

15) $672x^2$

16) $14x$

17) $96y^2$

18) $75ba^2$

19) $3yx^2$

20) $125y^3$