12-05-22-T11 Binomial Theorem

Expand completely.

1) $(2b-1)^5$

2) $(y-2x)^4$

3) $(m+n)^3$

4) $(x+2)^3$

5) $(2x+1)^5$

6) $(v-4)^4$

Find each term described.

7) 2nd term in expansion of $(3n+m)^4$

8) 5th term in expansion of $(y+3)^4$

9) 2nd term in expansion of $(m+n)^3$

10) 1st term in expansion of $(2v+1)^6$

11) 1st term in expansion of $(y-3x)^5$

12) 1st term in expansion of $(2x-1)^5$

Find each coefficient described.

13) Coefficient of u^2 in expansion of $(u+2)^4$

14) Coefficient of x^2y in expansion of $(x+y)^3$

15) Coefficient of a^3 in expansion of $(2a-1)^6$

16) Coefficient of x^2y^4 in expansion of $(x-2y)^6$

Answers to 12-05-22-T11 Binomial Theorem

1) $32b^5 - 80b^4 + 80b^3 - 40b^2 + 10b - 1$
2) $y^4 - 8y^3x + 24y^2x^2 - 32yx^3 + 16x^4$
3) $m^3 + 3m^2n + 3mn^2 + n^3$
4) $x^3 + 6x^2 + 12x + 8$
5) $32x^5 + 80x^4 + 80x^3 + 40x^2 + 10x + 1$
6) $v^4 - 16v^3 + 96v^2 - 256v + 256$
7) $108n^3m$
8) 81
9) $3m^2n$
10) $64v^6$
11) y^5
12) $32x^5$
13) 24
14) 3
15) -160
16) 240