12-05-23-T11 Binomial Theorem

Expand completely.

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

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

3) $(y+4)^4$

4) $(u-v)^3$

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

6) $(y-3x)^5$

Find each term described.

7) 4th term in expansion of $(a+4b)^4$

8) 6th term in expansion of $(m+2)^6$

9) 5th term in expansion of $(2+x)^6$

10) 6th term in expansion of $(2y-x)^5$

11) 3rd term in expansion of $(2y-1)^4$

12) 4th term in expansion of $(x-3)^3$

Find each coefficient described.

13) Coefficient of u^2v in expansion of $(u-v)^3$

14) Coefficient of y^5 in expansion of $(2+y)^6$

15) Coefficient of v^2u^3 in expansion of $(2v+u)^5$

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

Answers to 12-05-23-T11 Binomial Theorem

1) $32x^5 + 80x^4 + 80x^3 + 40x^2 + 10x + 1$
2) $v^4 + 16v^3u + 96v^2u^2 + 256vu^3 + 256u^4$
3) $y^4 + 16y^3 + 96y^2 + 256y + 256$
4) $u^3 - 3u^2v + 3uv^2 - v^3$
5) $32b^5 - 80b^4 + 80b^3 - 40b^2 + 10b - 1$
6) $y^5 - 15y^4x + 90y^3x^2 - 270y^2x^3 + 405yx^4 - 243x^5$
7) $256ab^3$
8) $192m$
9) $60x^4$
10) $-x^5$
11) $24y^2$
12) -27
13) -3
14) 12
15) 40
16) 270