

## SAT PREP

### Assignment - Binomial Theorem (Expansion and Particular term)

Expand completely.

1)  $(x^4 + y^3)^5$

2)  $(m^3 - n^4)^5$

3)  $(n^3 - m)^5$

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

Find each term described.

5) 2nd term in expansion of  $(2x + 3y)^4$

6) 2nd term in expansion of  $(u - v)^3$

7) 4th term in expansion of  $(a + 3)^4$

8) 3rd term in expansion of  $(3x - y)^4$

## Answers to Assignment - Binomial Theorem (Expansion and Particular term)

1)  $x^{20} + 5x^{16}y^3 + 10x^{12}y^6 + 10x^8y^9 + 5x^4y^{12} + y^{15}$

2)  $m^{15} - 5m^{12}n^4 + 10m^9n^8 - 10m^6n^{12} + 5m^3n^{16} - n^{20}$

3)  $n^{15} - 5n^{12}m + 10n^9m^2 - 10n^6m^3 + 5n^3m^4 - m^5$

5)  $96x^3y$

6)  $-3u^2v$

4)  $x^{12} + 8x^9y + 24x^6y^2 + 32x^3y^3 + 16y^4$

7)  $108a$

8)  $54x^2y^2$

