

**12-6****Practice Worksheet***The Binomial theorem*

Use Pascal's Triangle to expand each binomial.

1.  $(x - y)^4$

2.  $(r + 3)^5$

3.  $(m + 2n)^5$

4.  $(3a - b)^4$

Use the binomial theorem to expand each binomial.

5.  $(x - 5)^4$

6.  $(3x + 2y)^4$

7.  $(a - \sqrt{2})^5$

8.  $(2x - 3y)^6$

Find the designated term of each binomial expansion.

9. 4<sup>th</sup> term of  $(2n^2 - 3m)^4$

10. 3<sup>rd</sup> term of  $(a - 2\sqrt{3})^6$