NAME _____ DATE _____ PERIOD _____

12-6

Practice

The Binomial Theorem

Use Pascal's triangle to expand each binomial.

1. $(r + 3)^5$

2. $(3a - b)^4$

Use the Binomial Theorem to expand each binomial.

3. $(x - 5)^4$

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

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

6. $(2p - 3q)^6$

Find the designated term of each binomial expansion.

7. 4th term of $(2n - 3m)^4$

8. 5th term of $(4a + 2b)^8$

9. 6th term of $(3p + q)^9$

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

11. A varsity volleyball team needs nine members. Of these nine members, at least five must be seniors. How many of the possible groups of juniors and seniors have at least five seniors?