

PROBLEM SET 6-8
(The Binomial Theorem)

Expand each binomial.

1. $(x - 3)^3$

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

3. $(x + 2)^5$

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

5. $(2x + 3y)^4$

6. $(2x + y)^5$

Find the specified term of each binomial expansion.

7. Third term of $(x + 3)^{12}$

8. Fourth term of $(x + 2)^5$

9. Second term of $(x + 3)^9$

10. Third term of $(x - 2)^{12}$

11. Eighth term of $(x - 2y)^{15}$

12. Third term of $(3x - 2)^9$