

Worksheet 11.4

Find the coefficient of

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

2)  $b$  in the expansion of  $(3 + b)^4$

3)  $x^3y^2$  in the expansion of  $(x - 3y)^5$

4)  $a^2$  in the expansion of  $(2a + 1)^5$

Find the term described.

5) 2<sup>nd</sup> term in the expansion of  $(y - 2x)^4$

6) 4<sup>th</sup> term in the expansion of  $(4y + x)^4$

Expand Completely described.

Name: \_\_\_\_\_ # \_\_\_\_\_

7)  $(2m - 1)^4$

8)  $(x - 3)^5$

Evaluate

9)  $8!$

10)  $\frac{12!}{8!}$

11)  $\frac{16!}{12! 4!}$