

Find the product.

1.  $2x(3x^2 - 4x + 5)$

$6x^3 - 8x^2 + 10x$

2.  $3a(5a^6 - 2a^3 + a)$

$15a^7 - 6a^4 + 3a^2$

3.  $(4g^2 - 2)(-4g)$

$-4g(4g^2 - 2)$

$-16g^3 + 8g$

4.  $(2x + 1)(4x + 3)$

$8x^2 + 6x + 4x + 3$

$8x^2 + 10x + 3$

5.  $(2p + 1)(3p - 2)$

$6p^2 - 4p + 3p - 2$

$6p^2 - p - 2$

6.  $(2a + b)(2a + 3b)$

$4a^2 + 6ab + 2ab + 3b^2$

$4a^2 + 8ab + 3b^2$

Find the product.

7.  $(5a - 3)^2$

$(5a - 3)(5a - 3)$

$25a^2 - 15a - 15a + 9$

$25a^2 - 30a + 9$

8.  $(3k - 1)(3k^2 - 11k - 8)$

$9k^3 - 33k^2 - 24k - 3k^2 + 11k + 8$

$9k^3 - 36k^2 - 13k + 8$

$9k^3 - 36k^2 - 13k + 8$

	$3k^2$	$-11k$	$-8$
$3k$	$9k^3$	$-33k^2$	$-24k$
$-1$	$-3k^2$	$11k$	$8$

Box Method

$9k^3 - 36k^2 - 13k + 8$

9.  $2(4m + 3)(2m - 1)$

$(8m + 6)(2m - 1)$

$16m^2 - 8m + 12m - 6$

$16m^2 + 4m - 6$

10.  $(3c + 4)^2$

$(3c + 4)(3c + 4)$

$9c^2 + 12c + 12c + 16$

$9c^2 + 24c + 16$

11.  $(n+1)(2n^3 - n^2 + n + 12)$

$$2n^4 - n^3 + n^2 + 12n + 2n^3 - n^2 + n + 12$$

$$2n^4 - n^3 + 2n^3 + n^2 - n^2 + 12n + n + 12$$

$$2n^4 + n^3 + 13n + 12$$

	$2n^3$	$-n^2$	$n$	$12$
$n$	$2n^4$	$-n^3$	$n^2$	$12n$
$1$	$2n^3$	$-n^2$	$n$	$12$

Box Method

$$2n^4 + n^3 + 13n + 12$$

12.  $(3b^2 + 5)(b^2 - 5b + 4)$

$$3b^4 - 15b^3 + 12b^2 + 5b^3 - 25b + 20$$

$$3b^4 - 15b^3 + 17b^2 - 25b + 20$$

	$b^2$	$-5b$	$4$
$3b^2$	$3b^4$	$-15b^3$	$12b^2$
$5$	$5b^2$	$-25b$	$20$

Box Method

$$3b^4 - 15b^3 + 17b^2 - 25b + 20$$