



Expand each problem using the box method.

1)  $(4x^2 - 1x + 6)(6x^2 + 2x - 2)$

2)  $(-4x^2 - 5x + 7)(-8x^2 - 2x)$

3)  $(-9x^2 + 2x)(-8x^2 - 3x + 2)$

4)  $(-5x^2 - 3x)(-8x^2 - 9x + 9)$

5)  $(1x^2 - 2x)(1x^2 + 2x)$

6)  $(-1x^2 - 2x)(-7x^2 + 2x - 6)$

7)  $(-4x^2 + 2x)(-3x^2 - 4x + 7)$

8)  $(-2x^2 + 4x)(-4x^2 + 6x)$

9)  $(8x^2 + 6x)(2x^2 + 4x + 9)$

10)  $(-7x^2 - 4x)(6x^2 + 1x)$

**Answers**

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

6. \_\_\_\_\_

7. \_\_\_\_\_

8. \_\_\_\_\_

9. \_\_\_\_\_

10. \_\_\_\_\_



Expand each problem using the box method.

1)  $(4x^2 + -1x + 6)(6x^2 + 2x + -2)$

	$4x^2$	$-1x$	$6$
$6x^2$	$24x^4$	$-6x^3$	$36x^2$
$2x$	$8x^3$	$-2x^2$	$12x$
$-2$	$-8x^2$	$2x$	$-12$

2)  $(-4x^2 + -5x + 7)(-8x^2 + -2x)$

	$-4x^2$	$-5x$	$7$
$-8x^2$	$32x^4$	$40x^3$	$-56x^2$
$-2x$	$8x^3$	$10x^2$	$-14x$

3)  $(-9x^2 + 2x)(-8x^2 + -3x + 2)$

	$-9x^2$	$2x$
$-8x^2$	$72x^4$	$-16x^3$
$-3x$	$27x^3$	$-6x^2$
$2$	$-18x^2$	$4x$

4)  $(-5x^2 + -3x)(-8x^2 + -9x + 9)$

	$-5x^2$	$-3x$
$-8x^2$	$40x^4$	$24x^3$
$-9x$	$45x^3$	$27x^2$
$9$	$-45x^2$	$-27x$

5)  $(1x^2 + -2x)(1x^2 + 2x)$

	$1x^2$	$-2x$
$1x^2$	$1x^4$	$-2x^3$
$2x$	$2x^3$	$-4x^2$

6)  $(-1x^2 + -2x)(-7x^2 + 2x + -6)$

	$-1x^2$	$-2x$
$-7x^2$	$7x^4$	$14x^3$
$2x$	$-2x^3$	$-4x^2$
$-6$	$6x^2$	$12x$

7)  $(-4x^2 + 2x)(-3x^2 + -4x + 7)$

	$-4x^2$	$2x$
$-3x^2$	$12x^4$	$-6x^3$
$-4x$	$16x^3$	$-8x^2$
$7$	$-28x^2$	$14x$

8)  $(-2x^2 + 4x)(-4x^2 + 6x)$

	$-2x^2$	$4x$
$-4x^2$	$8x^4$	$-16x^3$
$6x$	$-12x^3$	$24x^2$

9)  $(8x^2 + 6x)(2x^2 + 4x + 9)$

	$8x^2$	$6x$
$2x^2$	$16x^4$	$12x^3$
$4x$	$32x^3$	$24x^2$
$9$	$72x^2$	$54x$

10)  $(-7x^2 + -4x)(6x^2 + 1x)$

	$-7x^2$	$-4x$
$6x^2$	$-42x^4$	$-24x^3$
$1x$	$-7x^3$	$-4x^2$

Answers

1.  $24x^4 + 2x^3 + 26x^2 + 14x - 12$

2.  $32x^4 + 48x^3 - 46x^2 - 14x$

3.  $72x^4 + 11x^3 - 24x^2 + 4x$

4.  $40x^4 + 69x^3 - 18x^2 - 27x$

5.  $x^4 0x^3 - 4x^2$

6.  $7x^4 + 12x^3 + 2x^2 + 12x$

7.  $12x^4 + 10x^3 - 36x^2 + 14x$

8.  $8x^4 - 28x^3 + 24x^2$

9.  $16x^4 + 44x^3 + 96x^2 + 54x$

10.  $-42x^4 - 31x^3 - 4x^2$