



Expand each problem using the box method.

1)  $(-4x^2 + -1x + 8)(2x^2 + -8x)$

2)  $(2x^2 + -4x)(-7x^2 + 3x + 8)$

3)  $(8x^2 + -9x)(5x^2 + -4x + 6)$

4)  $(-6x^2 + -3x + 8)(-6x^2 + 8x)$

5)  $(2x^2 + -6x + 5)(-5x^2 + -4x)$

6)  $(-3x^2 + 8x)(-7x^2 + 6x)$

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

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

9)  $(-8x^2 + -3x + 2)(-9x^2 + 6x)$

10)  $(-6x^2 + -5x)(8x^2 + 8x + -6)$

**Answers**

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

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

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

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

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

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

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

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

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

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



Expand each problem using the box method.

1)  $(-4x^2 + -1x + 8)(2x^2 + -8x)$

	$-4x^2$	$-1x$	$8$
$2x^2$	$-8x^4$	$-2x^3$	$16x^2$
$-8x$	$32x^3$	$8x^2$	$-64x$

2)  $(2x^2 + -4x)(-7x^2 + 3x + 8)$

	$2x^2$	$-4x$
$-7x^2$	$-14x^4$	$28x^3$
$3x$	$6x^3$	$-12x^2$
$8$	$16x^2$	$-32x$

3)  $(8x^2 + -9x)(5x^2 + -4x + 6)$

	$8x^2$	$-9x$
$5x^2$	$40x^4$	$-45x^3$
$-4x$	$-32x^3$	$36x^2$
$6$	$48x^2$	$-54x$

4)  $(-6x^2 + -3x + 8)(-6x^2 + 8x)$

	$-6x^2$	$-3x$	$8$
$-6x^2$	$36x^4$	$18x^3$	$-48x^2$
$8x$	$-48x^3$	$-24x^2$	$64x$

5)  $(2x^2 + -6x + 5)(-5x^2 + -4x)$

	$2x^2$	$-6x$	$5$
$-5x^2$	$-10x^4$	$30x^3$	$-25x^2$
$-4x$	$-8x^3$	$24x^2$	$-20x$

6)  $(-3x^2 + 8x)(-7x^2 + 6x)$

	$-3x^2$	$8x$
$-7x^2$	$21x^4$	$-56x^3$
$6x$	$-18x^3$	$48x^2$

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

	$7x^2$	$8x$	$4$
$7x^2$	$49x^4$	$56x^3$	$28x^2$
$-5x$	$-35x^3$	$-40x^2$	$-20x$
$5$	$35x^2$	$40x$	$20$

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

	$4x^2$	$5x$	$-3$
$-4x^2$	$-16x^4$	$-20x^3$	$12x^2$
$3x$	$12x^3$	$15x^2$	$-9x$
$3$	$12x^2$	$15x$	$-9$

9)  $(-8x^2 + -3x + 2)(-9x^2 + 6x)$

	$-8x^2$	$-3x$	$2$
$-9x^2$	$72x^4$	$27x^3$	$-18x^2$
$6x$	$-48x^3$	$-18x^2$	$12x$

10)  $(-6x^2 + -5x)(8x^2 + 8x + -6)$

	$-6x^2$	$-5x$
$8x^2$	$-48x^4$	$-40x^3$
$8x$	$-48x^3$	$-40x^2$
$-6$	$36x^2$	$30x$

Answers

1.  $-8x^4 + 30x^3 + 24x^2 - 64x$

2.  $-14x^4 + 34x^3 + 4x^2 - 32x$

3.  $40x^4 - 77x^3 + 84x^2 - 54x$

4.  $36x^4 - 30x^3 - 72x^2 + 64x$

5.  $-10x^4 + 22x^3 - 1x^2 - 20x$

6.  $21x^4 - 74x^3 + 48x^2$

7.  $49x^4 + 21x^3 + 23x^2 + 20x + 20$

8.  $-16x^4 - 8x^3 + 39x^2 + 6x - 9$

9.  $72x^4 - 21x^3 - 36x^2 + 12x$

10.  $-48x^4 - 88x^3 - 4x^2 + 30x$