



Expand each problem using the box method.

1) $(-3x^2 - 2x + 8)(-2x^2 - 9x)$

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

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

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

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

6) $(5x^2 + 7x + 8)(-2x^2 + 7x + 2)$

7) $(-9x^2 + 6x - 8)(6x^2 + 2x - 9)$

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

9) $(7x^2 - 5x - 3)(-2x^2 + 5x - 8)$

10) $(7x^2 - 3x + 5)(-4x^2 - 5x)$

Answers

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____



Expand each problem using the box method.

1) $(-3x^2 - 2x + 8)(-2x^2 - 9x)$

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

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

	$-8x^2$	$4x$	-6
$2x^2$	$-16x^4$	$8x^3$	$-12x^2$
$4x$	$-32x^3$	$16x^2$	$-24x$
-3	$24x^2$	$-12x$	18

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

	$3x^2$	$-3x$	2
$-4x^2$	$-12x^4$	$12x^3$	$-8x^2$
$4x$	$12x^3$	$-12x^2$	$8x$
4	$12x^2$	$-12x$	8

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

	$9x^2$	$3x$
$4x^2$	$36x^4$	$12x^3$
$-4x$	$-36x^3$	$-12x^2$

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

	$-2x^2$	$-3x$
$-3x^2$	$6x^4$	$9x^3$
$-9x$	$18x^3$	$27x^2$
5	$-10x^2$	$-15x$

6) $(5x^2 + 7x + 8)(-2x^2 + 7x + 2)$

	$5x^2$	$7x$	8
$-2x^2$	$-10x^4$	$-14x^3$	$-16x^2$
$7x$	$35x^3$	$49x^2$	$56x$
2	$10x^2$	$14x$	16

7) $(-9x^2 + 6x - 8)(6x^2 + 2x - 9)$

	$-9x^2$	$6x$	-8
$6x^2$	$-54x^4$	$36x^3$	$-48x^2$
$2x$	$-18x^3$	$12x^2$	$-16x$
-9	$81x^2$	$-54x$	72

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

	$6x^2$	$-2x$	5
$4x^2$	$24x^4$	$-8x^3$	$20x^2$
$-6x$	$-36x^3$	$12x^2$	$-30x$
9	$54x^2$	$-18x$	45

9) $(7x^2 - 5x - 3)(-2x^2 + 5x - 8)$

	$7x^2$	$-5x$	-3
$-2x^2$	$-14x^4$	$10x^3$	$6x^2$
$5x$	$35x^3$	$-25x^2$	$-15x$
-8	$-56x^2$	$40x$	24

10) $(7x^2 - 3x + 5)(-4x^2 - 5x)$

	$7x^2$	$-3x$	5
$-4x^2$	$-28x^4$	$12x^3$	$-20x^2$
$-5x$	$-35x^3$	$15x^2$	$-25x$

Answers

- $6x^4 + 31x^3 + 2x^2 - 72x$
- $-16x^4 - 24x^3 + 28x^2 - 36x + 18$
- $-12x^4 + 24x^3 - 8x^2 - 4x + 8$
- $36x^4 - 24x^3 - 12x^2$
- $6x^4 + 27x^3 + 17x^2 - 15x$
- $-10x^4 + 21x^3 + 43x^2 + 70x + 16$
- $-54x^4 + 18x^3 + 45x^2 - 70x + 72$
- $24x^4 - 44x^3 + 86x^2 - 48x + 45$
- $-14x^4 + 45x^3 - 75x^2 + 25x + 24$
- $-28x^4 - 23x^3 - 5x^2 - 25x$