



Expand each problem using the box method.

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

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

3) $(7x^2 - 4x)(9x^2 + 9x)$

4) $(-7x^2 - 9x + 5)(-9x^2 + 8x)$

5) $(3x^2 + 8x - 8)(-4x^2 + 7x)$

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

7) $(-3x^2 + 5x)(-5x^2 + 7x + 6)$

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

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

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

Answers

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____



Expand each problem using the box method.

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

	$3x^2$	$-3x$	2
$-2x^2$	$-6x^4$	$6x^3$	$-4x^2$
$2x$	$6x^3$	$-6x^2$	$4x$

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

	$6x^2$	$3x$	-6
$9x^2$	$54x^4$	$27x^3$	$-54x^2$
$-6x$	$-36x^3$	$-18x^2$	$36x$

3) $(7x^2 - 4x)(9x^2 + 9x)$

	$7x^2$	$-4x$
$9x^2$	$63x^4$	$-36x^3$
$9x$	$63x^3$	$-36x^2$

4) $(-7x^2 - 9x + 5)(-9x^2 + 8x)$

	$-7x^2$	$-9x$	5
$-9x^2$	$63x^4$	$81x^3$	$-45x^2$
$8x$	$-56x^3$	$-72x^2$	$40x$

5) $(3x^2 + 8x - 8)(-4x^2 + 7x)$

	$3x^2$	$8x$	-8
$-4x^2$	$-12x^4$	$-32x^3$	$32x^2$
$7x$	$21x^3$	$56x^2$	$-56x$

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

	$-2x^2$	$9x$	-9
$-8x^2$	$16x^4$	$-72x^3$	$72x^2$
$-9x$	$18x^3$	$-81x^2$	$81x$
-4	$8x^2$	$-36x$	36

7) $(-3x^2 + 5x)(-5x^2 + 7x + 6)$

	$-3x^2$	$5x$
$-5x^2$	$15x^4$	$-25x^3$
$7x$	$-21x^3$	$35x^2$
6	$-18x^2$	$30x$

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

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

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

	$4x^2$	$2x$
$-4x^2$	$-16x^4$	$-8x^3$
$-5x$	$-20x^3$	$-10x^2$
5	$20x^2$	$10x$

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

	$6x^2$	$-2x$
$-8x^2$	$-48x^4$	$16x^3$
$3x$	$18x^3$	$-6x^2$
8	$48x^2$	$-16x$

Answers

1. $-6x^4 + 12x^3 - 10x^2 + 4x$

2. $54x^4 - 9x^3 - 72x^2 + 36x$

3. $63x^4 + 27x^3 - 36x^2$

4. $63x^4 + 25x^3 - 117x^2 + 40x$

5. $-12x^4 - 11x^3 + 88x^2 - 56x$

6. $16x^4 - 54x^3 - 1x^2 + 45x + 36$

7. $15x^4 - 46x^3 + 17x^2 + 30x$

8. $-6x^4 - 5x^3 - 4x^2 - 15x$

9. $-16x^4 - 28x^3 + 10x^2 + 10x$

10. $-48x^4 + 34x^3 + 42x^2 - 16x$