



Expand each problem using the box method.

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

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

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

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

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

6) $(9x^2+-1)^2$

7) $(-8x^2+-1)^2$

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

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

10) $(8x^2+9x)^2$

Answers

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____



Expand each problem using the box method.

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

| | | |
|---------------------------|---------------------------|----------|
| | $-2x^2$ | 6 |
| $-2x^2$ | $4x^4$ | $-12x^2$ |
| 6 | $-12x^2$ | 36 |

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

| | | |
|-------------------------|-------------------------|----------|
| | $-6x$ | 9 |
| $-6x$ | $36x^2$ | $-54x$ |
| 9 | $-54x$ | 81 |

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

| | | |
|--------------------------|--------------------------|------------------------|
| | $8x^2$ | $8x$ |
| $8x^2$ | $64x^4$ | $64x^3$ |
| $8x$ | $64x^3$ | $64x^2$ |

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

| | | |
|---------------------------|---------------------------|-----------|
| | $-1x^2$ | -1 |
| $-1x^2$ | $1x^4$ | $1x^2$ |
| -1 | $1x^2$ | 1 |

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

| | | |
|------------------------|------------------------|----------|
| | $8x$ | 2 |
| $8x$ | $64x^2$ | $16x$ |
| 2 | $16x$ | 4 |

6) $(9x^2+-1)^2$

| | | |
|--------------------------|--------------------------|-----------|
| | $9x^2$ | -1 |
| $9x^2$ | $81x^4$ | $-9x^2$ |
| -1 | $-9x^2$ | 1 |

7) $(-8x^2+-1)^2$

| | | |
|---------------------------|---------------------------|-----------|
| | $-8x^2$ | -1 |
| $-8x^2$ | $64x^4$ | $8x^2$ |
| -1 | $8x^2$ | 1 |

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

| | | |
|--------------------------|--------------------------|------------------------|
| | $2x^2$ | $4x$ |
| $2x^2$ | $4x^4$ | $8x^3$ |
| $4x$ | $8x^3$ | $16x^2$ |

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

| | | |
|------------------------|------------------------|----------|
| | $1x$ | 8 |
| $1x$ | $1x^2$ | $8x$ |
| 8 | $8x$ | 64 |

10) $(8x^2+9x)^2$

| | | |
|--------------------------|--------------------------|------------------------|
| | $8x^2$ | $9x$ |
| $8x^2$ | $64x^4$ | $72x^3$ |
| $9x$ | $72x^3$ | $81x^2$ |

Answers

1. $4x^4 - 24x^2 + 36$

2. $36x^2 - 108x + 81$

3. $64x^4 + 128x^3 + 64x^2$

4. $x^4 + 2x^2 + 1$

5. $64x^2 + 32x + 4$

6. $81x^4 - 18x^2 + 1$

7. $64x^4 + 16x^2 + 1$

8. $4x^4 + 16x^3 + 16x^2$

9. $x^2 + 16x + 64$

10. $64x^4 + 144x^3 + 81x^2$