



Expand each problem using the box method.

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

2) $(2x+7)^2$

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

4) $(3x+1)^2$

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

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

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

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

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

10) $(4x^2 + -4)^2$

Answers

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____



Expand each problem using the box method.

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

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

2) $(2x+7)^2$

| | | |
|------|--------|-------|
| | $2x$ | 7 |
| $2x$ | $4x^2$ | $14x$ |
| 7 | $14x$ | 49 |

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

| | | |
|--------|----------|----------|
| | $9x^2$ | -6 |
| $9x^2$ | $81x^4$ | $-54x^2$ |
| -6 | $-54x^2$ | 36 |

4) $(3x+1)^2$

| | | |
|------|--------|------|
| | $3x$ | 1 |
| $3x$ | $9x^2$ | $3x$ |
| 1 | $3x$ | 1 |

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

| | | |
|---------|---------|---------|
| | $-4x^2$ | -6 |
| $-4x^2$ | $16x^4$ | $24x^2$ |
| -6 | $24x^2$ | 36 |

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

| | | |
|--------|---------|---------|
| | $7x^2$ | 7 |
| $7x^2$ | $49x^4$ | $49x^2$ |
| 7 | $49x^2$ | 49 |

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

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

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

| | | |
|------|---------|-------|
| | $8x$ | 5 |
| $8x$ | $64x^2$ | $40x$ |
| 5 | $40x$ | 25 |

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

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

10) $(4x^2 + -4)^2$

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

Answers

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

2. $4x^2 + 28x + 49$

3. $81x^4 - 108x^2 + 36$

4. $9x^2 + 6x + 1$

5. $16x^4 + 48x^2 + 36$

6. $49x^4 + 98x^2 + 49$

7. $16x^4 + 32x^3 + 16x^2$

8. $64x^2 + 80x + 25$

9. $4x^4 - 24x^2 + 36$

10. $16x^4 - 32x^2 + 16$