



Expand each problem using the box method.

1)  $(-2x-5)^2$

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

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

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

5)  $(5x-2)^2$

6)  $(-1x+5)^2$

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

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

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

10)  $(5x^2+2)^2$

**Answers**

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

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

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

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

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

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

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

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

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

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



Expand each problem using the box method.

1)  $(-2x-5)^2$

|            |            |           |
|------------|------------|-----------|
|            | <b>-2x</b> | <b>-5</b> |
| <b>-2x</b> | $4x^2$     | $10x$     |
| <b>-5</b>  | $10x$      | $25$      |

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

|                        |                        |           |
|------------------------|------------------------|-----------|
|                        | <b>-1x<sup>2</sup></b> | <b>-3</b> |
| <b>-1x<sup>2</sup></b> | $1x^4$                 | $3x^2$    |
| <b>-3</b>              | $3x^2$                 | $9$       |

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

|           |           |          |
|-----------|-----------|----------|
|           | <b>3x</b> | <b>8</b> |
| <b>3x</b> | $9x^2$    | $24x$    |
| <b>8</b>  | $24x$     | $64$     |

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

|                        |                        |            |
|------------------------|------------------------|------------|
|                        | <b>-8x<sup>2</sup></b> | <b>-6x</b> |
| <b>-8x<sup>2</sup></b> | $64x^4$                | $48x^3$    |
| <b>-6x</b>             | $48x^3$                | $36x^2$    |

5)  $(5x-2)^2$

|           |           |           |
|-----------|-----------|-----------|
|           | <b>5x</b> | <b>-2</b> |
| <b>5x</b> | $25x^2$   | $-10x$    |
| <b>-2</b> | $-10x$    | $4$       |

6)  $(-1x+5)^2$

|            |            |          |
|------------|------------|----------|
|            | <b>-1x</b> | <b>5</b> |
| <b>-1x</b> | $1x^2$     | $-5x$    |
| <b>5</b>   | $-5x$      | $25$     |

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

|                        |                        |           |
|------------------------|------------------------|-----------|
|                        | <b>-6x<sup>2</sup></b> | <b>-8</b> |
| <b>-6x<sup>2</sup></b> | $36x^4$                | $48x^2$   |
| <b>-8</b>              | $48x^2$                | $64$      |

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

|                       |                       |           |
|-----------------------|-----------------------|-----------|
|                       | <b>9x<sup>2</sup></b> | <b>9x</b> |
| <b>9x<sup>2</sup></b> | $81x^4$               | $81x^3$   |
| <b>9x</b>             | $81x^3$               | $81x^2$   |

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

|                       |                       |           |
|-----------------------|-----------------------|-----------|
|                       | <b>2x<sup>2</sup></b> | <b>-5</b> |
| <b>2x<sup>2</sup></b> | $4x^4$                | $-10x^2$  |
| <b>-5</b>             | $-10x^2$              | $25$      |

10)  $(5x^2+2)^2$

|                       |                       |          |
|-----------------------|-----------------------|----------|
|                       | <b>5x<sup>2</sup></b> | <b>2</b> |
| <b>5x<sup>2</sup></b> | $25x^4$               | $10x^2$  |
| <b>2</b>              | $10x^2$               | $4$      |

**Answers**

1.  $4x^2+20x+25$

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

3.  $9x^2+48x+64$

4.  $64x^4+96x^3+36x^2$

5.  $25x^2-20x+4$

6.  $x^2-10x+25$

7.  $36x^4+96x^2+64$

8.  $81x^4+162x^3+81x^2$

9.  $4x^4-20x^2+25$

10.  $25x^4+20x^2+4$