



Expand each problem using the box method.

1)  $(7x^2+4x)^2$

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

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

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

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

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

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

8)  $(7x+3)^2$

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

10)  $(2x^2+7x)^2$

Answers

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

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

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

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

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

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

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

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

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

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



Expand each problem using the box method.

1)  $(7x^2+4x)^2$

|        |         |         |
|--------|---------|---------|
|        | $7x^2$  | $4x$    |
| $7x^2$ | $49x^4$ | $28x^3$ |
| $4x$   | $28x^3$ | $16x^2$ |

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

|        |         |         |
|--------|---------|---------|
|        | $3x^2$  | $-3$    |
| $3x^2$ | $9x^4$  | $-9x^2$ |
| $-3$   | $-9x^2$ | $9$     |

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

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

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

|       |         |        |
|-------|---------|--------|
|       | $-4x$   | $5$    |
| $-4x$ | $16x^2$ | $-20x$ |
| $5$   | $-20x$  | $25$   |

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

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

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

|        |         |         |
|--------|---------|---------|
|        | $4x^2$  | $9$     |
| $4x^2$ | $16x^4$ | $36x^2$ |
| $9$    | $36x^2$ | $81$    |

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

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

8)  $(7x+3)^2$

|      |         |       |
|------|---------|-------|
|      | $7x$    | $3$   |
| $7x$ | $49x^2$ | $21x$ |
| $3$  | $21x$   | $9$   |

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

|       |         |       |
|-------|---------|-------|
|       | $-8x$   | $-3$  |
| $-8x$ | $64x^2$ | $24x$ |
| $-3$  | $24x$   | $9$   |

10)  $(2x^2+7x)^2$

|        |         |         |
|--------|---------|---------|
|        | $2x^2$  | $7x$    |
| $2x^2$ | $4x^4$  | $14x^3$ |
| $7x$   | $14x^3$ | $49x^2$ |

Answers

- $49x^4+56x^3+16x^2$
- $9x^4-18x^2+9$
- $64x^4+128x^3+64x^2$
- $16x^2-40x+25$
- $36x^2-72x+36$
- $16x^4+72x^2+81$
- $16x^4-32x^3+16x^2$
- $49x^2+42x+9$
- $64x^2+48x+9$
- $4x^4+28x^3+49x^2$