



Expand each problem using the box method.

1)  $(-6x^2 + -4)^2$

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

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

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

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

6)  $(-1x^2 + 8x)^2$

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

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

9)  $(5x^2 + 3)^2$

10)  $(7x^2 + 3x)^2$

Answers

- 1. \_\_\_\_\_
- 2. \_\_\_\_\_
- 3. \_\_\_\_\_
- 4. \_\_\_\_\_
- 5. \_\_\_\_\_
- 6. \_\_\_\_\_
- 7. \_\_\_\_\_
- 8. \_\_\_\_\_
- 9. \_\_\_\_\_
- 10. \_\_\_\_\_



Expand each problem using the box method.

1)  $(-6x^2 + -4)^2$

	<b><math>-6x^2</math></b>	<b><math>-4</math></b>
<b><math>-6x^2</math></b>	$36x^4$	$24x^2$
<b><math>-4</math></b>	$24x^2$	$16$

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

	<b><math>-1x^2</math></b>	<b><math>-4</math></b>
<b><math>-1x^2</math></b>	$1x^4$	$4x^2$
<b><math>-4</math></b>	$4x^2$	$16$

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

	<b><math>6x</math></b>	<b><math>-2</math></b>
<b><math>6x</math></b>	$36x^2$	$-12x$
<b><math>-2</math></b>	$-12x$	$4$

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

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

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

	<b><math>6x</math></b>	<b><math>7</math></b>
<b><math>6x</math></b>	$36x^2$	$42x$
<b><math>7</math></b>	$42x$	$49$

6)  $(-1x^2 + 8x)^2$

	<b><math>-1x^2</math></b>	<b><math>8x</math></b>
<b><math>-1x^2</math></b>	$1x^4$	$-8x^3$
<b><math>8x</math></b>	$-8x^3$	$64x^2$

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

	<b><math>7x</math></b>	<b><math>-3</math></b>
<b><math>7x</math></b>	$49x^2$	$-21x$
<b><math>-3</math></b>	$-21x$	$9$

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

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

9)  $(5x^2 + 3)^2$

	<b><math>5x^2</math></b>	<b><math>3</math></b>
<b><math>5x^2</math></b>	$25x^4$	$15x^2$
<b><math>3</math></b>	$15x^2$	$9$

10)  $(7x^2 + 3x)^2$

	<b><math>7x^2</math></b>	<b><math>3x</math></b>
<b><math>7x^2</math></b>	$49x^4$	$21x^3$
<b><math>3x</math></b>	$21x^3$	$9x^2$

Answers

1.  $36x^4 + 48x^2 + 16$

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

3.  $36x^2 - 24x + 4$

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

5.  $36x^2 + 84x + 49$

6.  $x^4 - 16x^3 + 64x^2$

7.  $49x^2 - 42x + 9$

8.  $25x^4 + 20x^2 + 4$

9.  $25x^4 + 30x^2 + 9$

10.  $49x^4 + 42x^3 + 9x^2$



Expand each problem using the box method.

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

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

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

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

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

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

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

8)  $(-5x^2+1)^2$

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

10)  $(-4x^2+-9)^2$

Answers

- 1. \_\_\_\_\_
- 2. \_\_\_\_\_
- 3. \_\_\_\_\_
- 4. \_\_\_\_\_
- 5. \_\_\_\_\_
- 6. \_\_\_\_\_
- 7. \_\_\_\_\_
- 8. \_\_\_\_\_
- 9. \_\_\_\_\_
- 10. \_\_\_\_\_



Expand each problem using the box method.

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

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

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

	<b><math>-9x^2</math></b>	<b>5x</b>
<b><math>-9x^2</math></b>	$81x^4$	$-45x^3$
<b>5x</b>	$-45x^3$	$25x^2$

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

	<b>7x</b>	<b>-9</b>
<b>7x</b>	$49x^2$	$-63x$
<b>-9</b>	$-63x$	81

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

	<b><math>-6x^2</math></b>	<b>-2</b>
<b><math>-6x^2</math></b>	$36x^4$	$12x^2$
<b>-2</b>	$12x^2$	4

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

	<b><math>8x^2</math></b>	<b>-2x</b>
<b><math>8x^2</math></b>	$64x^4$	$-16x^3$
<b>-2x</b>	$-16x^3$	$4x^2$

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

	<b><math>-2x^2</math></b>	<b>9</b>
<b><math>-2x^2</math></b>	$4x^4$	$-18x^2$
<b>9</b>	$-18x^2$	81

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

	<b><math>1x^2</math></b>	<b>-2</b>
<b><math>1x^2</math></b>	$1x^4$	$-2x^2$
<b>-2</b>	$-2x^2$	4

8)  $(-5x^2+1)^2$

	<b><math>-5x^2</math></b>	<b>1</b>
<b><math>-5x^2</math></b>	$25x^4$	$-5x^2$
<b>1</b>	$-5x^2$	1

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

	<b>-2x</b>	<b>1</b>
<b>-2x</b>	$4x^2$	$-2x$
<b>1</b>	$-2x$	1

10)  $(-4x^2+-9)^2$

	<b><math>-4x^2</math></b>	<b>-9</b>
<b><math>-4x^2</math></b>	$16x^4$	$36x^2$
<b>-9</b>	$36x^2$	81

Answers

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

2.  $81x^4-90x^3+25x^2$

3.  $49x^2-126x+81$

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

5.  $64x^4-32x^3+4x^2$

6.  $4x^4-36x^2+81$

7.  $x^4-4x^2+4$

8.  $25x^4-10x^2+1$

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

10.  $16x^4+72x^2+81$



Expand each problem using the box method.

1)  $(3x^2 + -8)^2$

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

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

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

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

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

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

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

9)  $(7x^2 + 1x)^2$

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

Answers

- 1. \_\_\_\_\_
- 2. \_\_\_\_\_
- 3. \_\_\_\_\_
- 4. \_\_\_\_\_
- 5. \_\_\_\_\_
- 6. \_\_\_\_\_
- 7. \_\_\_\_\_
- 8. \_\_\_\_\_
- 9. \_\_\_\_\_
- 10. \_\_\_\_\_



Expand each problem using the box method.

1)  $(3x^2 + -8)^2$

	$3x^2$	$-8$
$3x^2$	$9x^4$	$-24x^2$
$-8$	$-24x^2$	$64$

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

	$6x$	$6$
$6x$	$36x^2$	$36x$
$6$	$36x$	$36$

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

	$6x^2$	$9x$
$6x^2$	$36x^4$	$54x^3$
$9x$	$54x^3$	$81x^2$

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

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

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

	$-7x^2$	$-6$
$-7x^2$	$49x^4$	$42x^2$
$-6$	$42x^2$	$36$

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

	$5x$	$5$
$5x$	$25x^2$	$25x$
$5$	$25x$	$25$

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

	$-8x^2$	$4x$
$-8x^2$	$64x^4$	$-32x^3$
$4x$	$-32x^3$	$16x^2$

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

	$2x$	$-9$
$2x$	$4x^2$	$-18x$
$-9$	$-18x$	$81$

9)  $(7x^2+1x)^2$

	$7x^2$	$1x$
$7x^2$	$49x^4$	$7x^3$
$1x$	$7x^3$	$1x^2$

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

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

Answers

1.  $9x^4 - 48x^2 + 64$

2.  $36x^2 + 72x + 36$

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

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

5.  $49x^4 + 84x^2 + 36$

6.  $25x^2 + 50x + 25$

7.  $64x^4 - 64x^3 + 16x^2$

8.  $4x^2 - 36x + 81$

9.  $49x^4 + 14x^3 + 9$

10.  $64x^2 - 48x + 9$



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

	<b><math>-2x^2</math></b>	<b>6</b>
<b><math>-2x^2</math></b>	$4x^4$	$-12x^2$
<b>6</b>	$-12x^2$	$36$

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

	<b><math>-6x</math></b>	<b>9</b>
<b><math>-6x</math></b>	$36x^2$	$-54x$
<b>9</b>	$-54x$	$81$

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

	<b><math>8x^2</math></b>	<b><math>8x</math></b>
<b><math>8x^2</math></b>	$64x^4$	$64x^3$
<b><math>8x</math></b>	$64x^3$	$64x^2$

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

	<b><math>-1x^2</math></b>	<b>-1</b>
<b><math>-1x^2</math></b>	$1x^4$	$1x^2$
<b>-1</b>	$1x^2$	$1$

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

	<b><math>8x</math></b>	<b>2</b>
<b><math>8x</math></b>	$64x^2$	$16x$
<b>2</b>	$16x$	$4$

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

	<b><math>9x^2</math></b>	<b>-1</b>
<b><math>9x^2</math></b>	$81x^4$	$-9x^2$
<b>-1</b>	$-9x^2$	$1$

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

	<b><math>-8x^2</math></b>	<b>-1</b>
<b><math>-8x^2</math></b>	$64x^4$	$8x^2$
<b>-1</b>	$8x^2$	$1$

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

	<b><math>2x^2</math></b>	<b><math>4x</math></b>
<b><math>2x^2</math></b>	$4x^4$	$8x^3$
<b><math>4x</math></b>	$8x^3$	$16x^2$

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

	<b><math>1x</math></b>	<b>8</b>
<b><math>1x</math></b>	$1x^2$	$8x$
<b>8</b>	$8x$	$64$

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

	<b><math>8x^2</math></b>	<b><math>9x</math></b>
<b><math>8x^2</math></b>	$64x^4$	$72x^3$
<b><math>9x</math></b>	$72x^3$	$81x^2$

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





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

- $x^4 - 4x^3 + 4x^2$
- $4x^2 + 28x + 49$
- $81x^4 - 108x^2 + 36$
- $9x^2 + 6x + 1$
- $16x^4 + 48x^2 + 36$
- $49x^4 + 98x^2 + 49$
- $16x^4 + 32x^3 + 16x^2$
- $64x^2 + 80x + 25$
- $4x^4 - 24x^2 + 36$
- $16x^4 - 32x^2 + 16$



Expand each problem using the box method.

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

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

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

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

5)  $(8x+6)^2$

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

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

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

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

10)  $(7x+-8)^2$

Answers

- 1. \_\_\_\_\_
- 2. \_\_\_\_\_
- 3. \_\_\_\_\_
- 4. \_\_\_\_\_
- 5. \_\_\_\_\_
- 6. \_\_\_\_\_
- 7. \_\_\_\_\_
- 8. \_\_\_\_\_
- 9. \_\_\_\_\_
- 10. \_\_\_\_\_



Expand each problem using the box method.

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

	<b><math>-7x^2</math></b>	<b><math>2x</math></b>
<b><math>-7x^2</math></b>	$49x^4$	$-14x^3$
<b><math>2x</math></b>	$-14x^3$	$4x^2$

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

	<b><math>5x^2</math></b>	<b><math>5</math></b>
<b><math>5x^2</math></b>	$25x^4$	$25x^2$
<b><math>5</math></b>	$25x^2$	$25$

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

	<b><math>-8x^2</math></b>	<b><math>8x</math></b>
<b><math>-8x^2</math></b>	$64x^4$	$-64x^3$
<b><math>8x</math></b>	$-64x^3$	$64x^2$

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

	<b><math>8x^2</math></b>	<b><math>9</math></b>
<b><math>8x^2</math></b>	$64x^4$	$72x^2$
<b><math>9</math></b>	$72x^2$	$81$

5)  $(8x+6)^2$

	<b><math>8x</math></b>	<b><math>6</math></b>
<b><math>8x</math></b>	$64x^2$	$48x$
<b><math>6</math></b>	$48x$	$36$

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

	<b><math>-7x</math></b>	<b><math>-2</math></b>
<b><math>-7x</math></b>	$49x^2$	$14x$
<b><math>-2</math></b>	$14x$	$4$

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

	<b><math>-2x</math></b>	<b><math>-4</math></b>
<b><math>-2x</math></b>	$4x^2$	$8x$
<b><math>-4</math></b>	$8x$	$16$

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

	<b><math>1x^2</math></b>	<b><math>-7</math></b>
<b><math>1x^2</math></b>	$1x^4$	$-7x^2$
<b><math>-7</math></b>	$-7x^2$	$49$

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

	<b><math>-4x^2</math></b>	<b><math>7</math></b>
<b><math>-4x^2</math></b>	$16x^4$	$-28x^2$
<b><math>7</math></b>	$-28x^2$	$49$

10)  $(7x+-8)^2$

	<b><math>7x</math></b>	<b><math>-8</math></b>
<b><math>7x</math></b>	$49x^2$	$-56x$
<b><math>-8</math></b>	$-56x$	$64$

Answers

1.  $49x^4-28x^3+4x^2$

2.  $25x^4+50x^2+25$

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

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

5.  $64x^2+96x+36$

6.  $49x^2+28x+4$

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

8.  $x^4-14x^2+49$

9.  $16x^4-56x^2+49$

10.  $49x^2-112x+64$



Expand each problem using the box method.

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

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

3)  $(7x+1)^2$

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

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

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

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

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

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

10)  $(-5x+4)^2$

Answers

- 1. \_\_\_\_\_
- 2. \_\_\_\_\_
- 3. \_\_\_\_\_
- 4. \_\_\_\_\_
- 5. \_\_\_\_\_
- 6. \_\_\_\_\_
- 7. \_\_\_\_\_
- 8. \_\_\_\_\_
- 9. \_\_\_\_\_
- 10. \_\_\_\_\_



Expand each problem using the box method.

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

	<b>2x</b>	<b>-4</b>
<b>2x</b>	$4x^2$	$-8x$
<b>-4</b>	$-8x$	$16$

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

	<b>9x</b>	<b>1</b>
<b>9x</b>	$81x^2$	$9x$
<b>1</b>	$9x$	$1$

3)  $(7x+1)^2$

	<b>7x</b>	<b>-1</b>
<b>7x</b>	$49x^2$	$-7x$
<b>-1</b>	$-7x$	$1$

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

	<b>-4x</b>	<b>7</b>
<b>-4x</b>	$16x^2$	$-28x$
<b>7</b>	$-28x$	$49$

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

	<b>-4x</b>	<b>-7</b>
<b>-4x</b>	$16x^2$	$28x$
<b>-7</b>	$28x$	$49$

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

	<b>4x<sup>2</sup></b>	<b>-6x</b>
<b>4x<sup>2</sup></b>	$16x^4$	$-24x^3$
<b>-6x</b>	$-24x^3$	$36x^2$

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

	<b>-3x</b>	<b>-6</b>
<b>-3x</b>	$9x^2$	$18x$
<b>-6</b>	$18x$	$36$

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

	<b>9x</b>	<b>3</b>
<b>9x</b>	$81x^2$	$27x$
<b>3</b>	$27x$	$9$

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

	<b>-3x</b>	<b>-7</b>
<b>-3x</b>	$9x^2$	$21x$
<b>-7</b>	$21x$	$49$

10)  $(-5x+4)^2$

	<b>-5x</b>	<b>-4</b>
<b>-5x</b>	$25x^2$	$20x$
<b>-4</b>	$20x$	$16$

Answers

1.  $4x^2-16x+16$

2.  $81x^2+18x+1$

3.  $49x^2-14x+1$

4.  $16x^2-56x+49$

5.  $16x^2+56x+49$

6.  $16x^4-48x^3+36x^2$

7.  $9x^2+36x+36$

8.  $81x^2+54x+9$

9.  $9x^2+42x+49$

10.  $25x^2+40x+16$



Expand each problem using the box method.

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

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

3)  $(-4x+6)^2$

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

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

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

7)  $(7x^2+5)^2$

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

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

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

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

	$-7x^2$	$3x$
$-7x^2$	$49x^4$	$-21x^3$
$3x$	$-21x^3$	$9x^2$

3)  $(-4x+6)^2$

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

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

	$-6x^2$	$8x$
$-6x^2$	$36x^4$	$-48x^3$
$8x$	$-48x^3$	$64x^2$

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

	$-5x^2$	$-4x$
$-5x^2$	$25x^4$	$20x^3$
$-4x$	$20x^3$	$16x^2$

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

	$6x$	$-3$
$6x$	$36x^2$	$-18x$
$-3$	$-18x$	$9$

7)  $(7x^2+5)^2$

	$7x^2$	$5$
$7x^2$	$49x^4$	$35x^2$
$5$	$35x^2$	$25$

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

	$-4x^2$	$3$
$-4x^2$	$16x^4$	$-12x^2$
$3$	$-12x^2$	$9$

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

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

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

	$8x^2$	$-6$
$8x^2$	$64x^4$	$-48x^2$
$-6$	$-48x^2$	$36$

Answers

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

2.  $49x^4-42x^3+9x^2$

3.  $16x^2-48x+36$

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

5.  $25x^4+40x^3+16x^2$

6.  $36x^2-36x+9$

7.  $49x^4+70x^2+25$

8.  $16x^4-24x^2+9$

9.  $36x^2-48x+16$

10.  $64x^4-96x^2+36$





Expand each problem using the box method.

1)  $(3x+9)^2$

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

3)  $(-4x+-6)^2$

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

5)  $(7x^2+5)^2$

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

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

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

9)  $(-1x+-4)^2$

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

Answers

- 1. \_\_\_\_\_
- 2. \_\_\_\_\_
- 3. \_\_\_\_\_
- 4. \_\_\_\_\_
- 5. \_\_\_\_\_
- 6. \_\_\_\_\_
- 7. \_\_\_\_\_
- 8. \_\_\_\_\_
- 9. \_\_\_\_\_
- 10. \_\_\_\_\_



Expand each problem using the box method.

1)  $(3x+9)^2$

	<b>3x</b>	<b>9</b>
<b>3x</b>	$9x^2$	$27x$
<b>9</b>	$27x$	$81$

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

	<b>-6x<sup>2</sup></b>	<b>-5</b>
<b>-6x<sup>2</sup></b>	$36x^4$	$30x^2$
<b>-5</b>	$30x^2$	$25$

3)  $(-4x+-6)^2$

	<b>-4x</b>	<b>-6</b>
<b>-4x</b>	$16x^2$	$24x$
<b>-6</b>	$24x$	$36$

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

	<b>-8x<sup>2</sup></b>	<b>9x</b>
<b>-8x<sup>2</sup></b>	$64x^4$	$-72x^3$
<b>9x</b>	$-72x^3$	$81x^2$

5)  $(7x^2+5)^2$

	<b>7x<sup>2</sup></b>	<b>5</b>
<b>7x<sup>2</sup></b>	$49x^4$	$35x^2$
<b>5</b>	$35x^2$	$25$

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

	<b>4x<sup>2</sup></b>	<b>-5x</b>
<b>4x<sup>2</sup></b>	$16x^4$	$-20x^3$
<b>-5x</b>	$-20x^3$	$25x^2$

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

	<b>-7x<sup>2</sup></b>	<b>-2x</b>
<b>-7x<sup>2</sup></b>	$49x^4$	$14x^3$
<b>-2x</b>	$14x^3$	$4x^2$

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

	<b>-1x</b>	<b>-4</b>
<b>-1x</b>	$1x^2$	$4x$
<b>-4</b>	$4x$	$16$

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

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

Answers

1.  $9x^2+54x+81$

2.  $36x^4+60x^2+25$

3.  $16x^2+48x+36$

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

5.  $49x^4+70x^2+25$

6.  $16x^4-40x^3+25x^2$

7.  $49x^4+28x^3+4x^2$

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

9.  $x^2+8x+16$

10.  $9x^2-48x+64$



Expand each problem using the box method.

1)  $(3x^2 + -7x)^2$

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

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

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

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

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

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

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

9)  $(-5x^2 + 6)^2$

10)  $(-3x^2 + -1)^2$

**Answers**

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

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

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

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

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

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

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

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

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

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



Expand each problem using the box method.

1)  $(3x^2 + -7x)^2$

	$3x^2$	$-7x$
$3x^2$	$9x^4$	$-21x^3$
$-7x$	$-21x^3$	$49x^2$

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

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

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

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

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

	$9x^2$	$7x$
$9x^2$	$81x^4$	$63x^3$
$7x$	$63x^3$	$49x^2$

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

	$-5x$	$-9$
$-5x$	$25x^2$	$45x$
$-9$	$45x$	$81$

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

	$-2x$	$-2$
$-2x$	$4x^2$	$4x$
$-2$	$4x$	$4$

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

	$-5x^2$	$2x$
$-5x^2$	$25x^4$	$-10x^3$
$2x$	$-10x^3$	$4x^2$

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

	$-6x^2$	$-8x$
$-6x^2$	$36x^4$	$48x^3$
$-8x$	$48x^3$	$64x^2$

9)  $(-5x^2 + 6)^2$

	$-5x^2$	$6$
$-5x^2$	$25x^4$	$-30x^2$
$6$	$-30x^2$	$36$

10)  $(-3x^2 + -1)^2$

	$-3x^2$	$-1$
$-3x^2$	$9x^4$	$3x^2$
$-1$	$3x^2$	$1$

Answers

1.  $9x^4 - 42x^3 + 49x^2$

2.  $16x^4 + 72x^2 + 81$

3.  $36x^4 + 24x^2 + 4$

4.  $81x^4 + 126x^3 + 49x^2$

5.  $25x^2 + 90x + 81$

6.  $4x^2 + 8x + 4$

7.  $25x^4 - 20x^3 + 4x^2$

8.  $36x^4 + 96x^3 + 64x^2$

9.  $25x^4 - 60x^2 + 36$

10.  $9x^4 + 6x^2 + 1$