EduSahara™ Learning Center Assignment

Grade : Class VIII, SSC
Chapter : Algebraic Expressions
Name : Polynomial Product Expansion
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1. The expanded form of $(x - 1) (3 x + 1)$ is

   (i) $(- 2 x - 1)$

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

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

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

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

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2. The expanded form of $(3 x - 7) (3 x - 2) (x - 4)$ is

   (i) $(7 x^3 - 63 x^2 + 122 x - 56)$

   (ii) $(10 x^3 - 63 x^2 + 122 x - 56)$

   (iii) $(8 x^3 - 63 x^2 + 122 x - 56)$

   (iv) $(9 x^3 - 63 x^2 + 122 x - 56)$

   (v) $(12 x^3 - 63 x^2 + 122 x - 56)$

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3. The expanded form of $(x + 4) (x + 4) (x + 2) (x - 3)$ is

   (i) $(4 x^4 + 7 x^3 + 2 x^2 - 64 x - 96)$

   (ii) $(7 x^3 + 2 x^2 - 64 x - 96)$

(iii) $(-x^4 + 7x^3 + 2x^2 - 64x - 96)$

(iv) $(x^4 + 7x^3 + 2x^2 - 64x - 96)$

(v) $(2x^4 + 7x^3 + 2x^2 - 64x - 96)$

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4. The expanded form of $(x - 6) (3x + 3)$ is

(i) $(2x^2 - 15x - 18)$

(ii) $(4x^2 - 15x - 18)$

(iii) $(6x^2 - 15x - 18)$

(iv) $(x^2 - 15x - 18)$

(v) $(3x^2 - 15x - 18)$

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5. The expanded form of $(2x + 5) (3x - 3) (2x + 5)$ is

(i) $(11x^3 + 48x^2 + 15x - 75)$

(ii) $(13x^3 + 48x^2 + 15x - 75)$

(iii) $(15x^3 + 48x^2 + 15x - 75)$

(iv) $(12x^3 + 48x^2 + 15x - 75)$

(v) $(9x^3 + 48x^2 + 15x - 75)$

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6. The expanded form of $(x + 3) (x + 8) (x + 5) (x - 3)$ is

(i) $(x^4 + 13x^3 + 31x^2 - 117x - 360)$

(ii) $(2x^4 + 13x^3 + 31x^2 - 117x - 360)$

(iii) $(-x^4 + 13x^3 + 31x^2 - 117x - 360)$

(iv) $(3x^4 + 13x^3 + 31x^2 - 117x - 360)$

(v) $(13x^3 + 31x^2 - 117x - 360)$

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7. The expanded form of $(3x + 3)(2x - 8)$ is

(i) $(7x^2 - 18x - 24)$

(ii) $(5x^2 - 18x - 24)$

(iii) $(4x^2 - 18x - 24)$

(iv) $(8x^2 - 18x - 24)$

(v) $(6x^2 - 18x - 24)$

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8. The expanded form of $(2x - 3)(2x + 2)(x - 1)$ is

(i) $(5x^3 - 6x^2 - 4x + 6)$

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

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

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

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

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9. The expanded form of $(x - 4)(x + 5)(x + 5)(x + 6)$ is

(i) $(12x^3 + 21x^2 - 190x - 600)$

(ii) $(-2x^4 + 12x^3 + 21x^2 - 190x - 600)$

(iii) $(x^4 + 12x^3 + 21x^2 - 190x - 600)$

(iv) $(2x^4 + 12x^3 + 21x^2 - 190x - 600)$

(v) $(3x^4 + 12x^3 + 21x^2 - 190x - 600)$

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10. The expanded form of $(3x - 5)(2x - 4)$ is

(i) $(5x^2 - 22x + 20)$

(ii) $(6x^2 - 22x + 20)$

(iii) $(7x^2 - 22x + 20)$

(iv) $(8x^2 - 22x + 20)$

(v) $(4x^2 - 22x + 20)$

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11. The expanded form of $(2x + 1)(2x - 7)(3x + 4)$ is

(i) $(11x^3 - 20x^2 - 69x - 28)$

(ii) $(14x^3 - 20x^2 - 69x - 28)$

(iii) $(12x^3 - 20x^2 - 69x - 28)$

(iv) $(13x^3 - 20x^2 - 69x - 28)$

(v) $(10x^3 - 20x^2 - 69x - 28)$

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12. The expanded form of $(x - 3)(x + 7)(x + 1)(x - 5)$ is

(i) $(-42x^2 + 64x + 105)$

(ii) $(2x^4 - 42x^2 + 64x + 105)$

(iii) $(4x^4 - 42x^2 + 64x + 105)$

(iv) $(x^4 - 42x^2 + 64x + 105)$

(v) $(-x^4 - 42x^2 + 64x + 105)$

Assignment Key

1) (ii)
2) (iv)
3) (iv)
4) (v)
5) (iv)
6) (i)
7) (v)
8) (v)
9) (iii)
10) (ii)
11) (iii)
12) (iv)