ADDITION OF POLYNOMIALS

Simplify

1 $(4x^2 + 5x + 7) + (3x^2 - 8x + 15)$

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2 $(8x^2 + 7xy - 5y^2) + (4x^2 - 3xy + 3y^2)$

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3 $(3x^2 - 5x + 8) + (7x^2 + 6x - 9)$

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4 $(x^4 - 3 - 3x^3) + (-5x^4 + 6x^3 - 8x^5)$

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5 $4(3x^2 + 6x - 8) + 3(2x^2 - 5x + 7)$

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6 $(2x - 5)^2 + 3x^2 + 17$

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7 $7(x^2 - 2x + 1) + 9(x^2 + 8x + 3)$

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8 $(-10x^4 - 2x^3 - 9x) + (2x^3 + 10x^4 + 9x + 6x^2)$

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Answers

1 $(4x^2 + 5x + 7) + (3x^2 - 8x + 15)$ 5 $4(3x^2 + 6x - 8) + 3(2x^2 - 5x + 7)$

$\underline{7x^2 - 3x + 22}$ $\underline{18x^2 + 9x - 21}$

2 $(8x^2 + 7xy - 5y^2) + (4x^2 - 3xy + 3y^2)$ 6 $(2x - 5)^2 + 3x^2 + 17$

$\underline{12x^2 + 4xy - 2y^2}$ $\underline{7x^2 - 20x + 42}$

3 $(3x^2 - 5x + 8) + (7x^2 + 6x - 9)$ 7 $7(x^2 - 2x + 1) + 9(x^2 + 8x + 3)$

$\underline{10x^2 + x - 1}$ $\underline{16x^2 + 58x + 34}$

4 $(x^4 - 3 - 3x^3) + (-5x^4 + 6x^3 - 8x^5)$ 8 $(-10x^4 - 2x^3 - 9x) + (2x^3 + 10x^4 + 9x + 6x^2)$

$\underline{-8x^5 - 4x^4 + 3x^3 - 3}$ $\underline{6x^2}$