

ADDING AND SUBTRACTING POLYNOMIALS

$$(x^3 + 8x^2 - 15x + 11) + (3x^3 - 5x^2 - 4x + 9)$$

$$\underline{\hspace{1cm}}x^3 + \underline{\hspace{1cm}}x^2 + \underline{\hspace{1cm}}x + \underline{\hspace{1cm}}$$

$$(-2x^4 + x^3 + 12x^2 + 6x - 18) - (4x^4 - 7x^3 + 14x^2 + 18x - 25)$$

$$\underline{\hspace{1cm}}x^4 + \underline{\hspace{1cm}}x^3 + \underline{\hspace{1cm}}x^2 + \underline{\hspace{1cm}}x + \underline{\hspace{1cm}}$$

$$(10x^3 - x^2 + 6x + 3) + (x^4 - 3x^3 + 8x^2 - 9x + 16)$$

$$\underline{\hspace{1cm}}x^4 + \underline{\hspace{1cm}}x^3 + \underline{\hspace{1cm}}x^2 + \underline{\hspace{1cm}}x + \underline{\hspace{1cm}}$$

$$(7x^3 - 2x^2 + 4x - 5) - (6x^4 + 10x^3 + x^2 + 4x - 1)$$

$$\underline{\hspace{1cm}}x^4 + \underline{\hspace{1cm}}x^3 + \underline{\hspace{1cm}}x^2 + \underline{\hspace{1cm}}x + \underline{\hspace{1cm}}$$

$$(15x^2 + x - 27) + (3x^3 - 12x + 16)$$

$$\underline{\hspace{1cm}}x^3 + \underline{\hspace{1cm}}x^2 + \underline{\hspace{1cm}}x + \underline{\hspace{1cm}}$$

$$(2x^5 - 3x^4 + 21x^2 + 11x - 32) - (x^4 - 3x^3 - 9x^2 + 14x - 15)$$

$$\underline{\hspace{1cm}}x^5 + \underline{\hspace{1cm}}x^4 + \underline{\hspace{1cm}}x^3 + \underline{\hspace{1cm}}x^2 + \underline{\hspace{1cm}}x + \underline{\hspace{1cm}}$$

$$(0.56x^5 + 1.75x^3 - 4.73x^2) + (1.29x^4 - 3.59x^3 + 6.32x^2)$$

$$\underline{\hspace{1cm}}x^5 + \underline{\hspace{1cm}}x^4 + \underline{\hspace{1cm}}x^3 + \underline{\hspace{1cm}}x^2 + \underline{\hspace{1cm}}x + \underline{\hspace{1cm}}$$

$$\left(\frac{1}{4}x^3 - \frac{2}{3}x^2 + \frac{4}{5}x\right) - \left(\frac{5}{8}x^3 - \frac{7}{9}x^2 + \frac{4}{15}x\right)$$

$$\underline{\hspace{1cm}}x^3 + \underline{\hspace{1cm}}x^2 + \underline{\hspace{1cm}}x$$

$$(8x^3 - 13x^2 + 24) - (x^3 + 4x^2 - 2x + 17) + (5x^2 + 18x - 19)$$

$$\underline{\hspace{1cm}}x^3 + \underline{\hspace{1cm}}x^2 + \underline{\hspace{1cm}}x + \underline{\hspace{1cm}}$$

$$(-7x^5 + 8x^4 + 11) - (-5x^5 + 3x^3 - 12) - (-6x^4 + 7x^3 - 7)$$

$$\underline{\hspace{1cm}}x^3 + \underline{\hspace{1cm}}x^2 + \underline{\hspace{1cm}}x + \underline{\hspace{1cm}}$$

Find the perimeter of a rectangular frame with sides of $2x-5$ and $3x+4$

You work two jobs—as waitstaff a couple of nights during the week and as a cashier on the weekends. The waitstaff job pays \$5.50 per hour and you make about \$50 in tips per night and the cashier jobs pays \$9.50 per hour. If you work 20 hours a week between the two jobs, write a polynomial model to describe your pay each week.
