

Övningsblad på förenklingar

Förenkla följande uttryck (skriv på så enkel form som möjligt)

$$4x + 3y + 9x - y = \underline{\hspace{10cm}}$$

$$x^2 - 5y + 2x^2 - 2y = \underline{\hspace{10cm}}$$

$$12 + 8x + 3x - 5x = \underline{\hspace{10cm}}$$

$$16x - x + 9x - 2x = \underline{\hspace{10cm}}$$

$$-2x + 5 + 11 - 3x = \underline{\hspace{10cm}}$$

$$4x^2 - 3x^3 - x^2 + 2x^3 = \underline{\hspace{10cm}}$$

$$3x^3 + 3x^2 + 3x - 4 = \underline{\hspace{10cm}}$$

$$(4x + 3y) + (9x - y) = \underline{\hspace{10cm}}$$

$$-(4x + 3y) + (9x - y) = \underline{\hspace{10cm}}$$

$$(3 + 8x) - (2x - 2) = \underline{\hspace{10cm}}$$

$$(8 + 3x) - (-2x + 4) = \underline{\hspace{10cm}}$$

$$-(3x^3 + 4x^2) + (2x^2 - x^3) = \underline{\hspace{10cm}}$$

$$-(2x + 4 + 6x - 11) = \underline{\hspace{10cm}}$$

$$-(4\pi - 2x) - (x - \pi) = \underline{\hspace{10cm}}$$

$$(2x + 2z - 3) - (-4x - 5z + 4) = \underline{\hspace{10cm}}$$

$$3(4x - 2y) - 2(6x - 3y) = \underline{\hspace{10cm}}$$

$$4x(-1 + 4x) + 2x(9x - 2) = \underline{\hspace{10cm}}$$

$$2(-2x - 3) - (9x - 4) = \underline{\hspace{10cm}}$$

$$2(3x + 4y - 3) - 3(2x - y + 4) = \underline{\hspace{10cm}}$$

$$4xyz(2 + 6 - 8) - 18xyz(-4x + 5x - x) = \underline{\hspace{10cm}}$$

$$-3(-x - 2) - (-2x - (-8)) = \underline{\hspace{10cm}}$$

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$$4x + 3y + 9x - y = 13x + 2y$$

$$x^2 - 5y + 2x^2 - 2y = 3x^2 - 7y$$

$$12 + 8x + 3x - 5x = 12 + 6x$$

$$16x - x + 9x - 2x = 22x$$

$$-2x + 5 + 11 - 3x = 16 - 5x$$

$$4x^2 - 3x^3 - x^2 + 2x^3 = 3x^2 - x^3$$

$$3x^3 + 3x^2 + 3x - 4 \text{ Kan inte förenklas}$$

$$(4x + 3y) + (9x - y) = 4x + 3y + 9x - y = 13x + 2y$$

$$-(4x + 3y) + (9x - y) = -4x - 3y + 9x - y = 5x - 4y$$

$$(3 + 8x) - (2x - 2) = 3 + 8x - 2x + 2 = 5 + 6x$$

$$(8 + 3x) - (-2x + 4) = 8 + 3x + 2x - 4 = 4 + 5x$$

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

$$-(2x + 4 + 6x - 11) = -2x - 4 - 6x + 11 = -8x + 7$$

$$-(4\pi - 2x) - (x - \pi) = -4\pi + 2x - x + \pi = -3\pi + x$$

$$(2x + 2z - 3) - (-4x - 5z + 4) = 2x + 2z - 3 + 4x + 5z - 4 = 6x + 7z - 7$$

$$3(4x - 2y) - 2(6x - 3y) = 12x - 6y - 12x + 6y = 0$$

$$4x(-1 + 4x) + 2x(9x - 2) = -4x + 16x^2 + 18x^2 - 4x = -8x + 34x^2$$

$$2(-2x - 3) - (9x - 4) = -4x - 6 - 9x + 4 = -13x - 2$$

$$2(3x + 4y - 3) - 3(2x - y + 4) = 6x + 8y - 6 - (6x - 3y + 12) = 6x + 8y - 6 - 6x + 3y - 12 = 11y - 18$$

$$4xyz(2 + 6 - 8) - 18xyz(-4x + 5x - x) = 4xyz(0) - 18xyz(0) = 0 - 0 = 0$$

$$-3(-x - 2) - (-2x - (-8)) = 3x + 6 + 2x + (-8) = 5x - 2$$