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Maths 2de



Quelle expression est une forme factorisée de $(x + 2)(4x - 5) - (x + 2)(6x - 9)$?

a $(x + 2)(-2x - 14)$

b $-2(x + 2)(x - 2)$

$$\begin{aligned}(x + 2)(4x - 5) - (x + 2)(6x - 9) &= (x + 2)[(4x - 5) - (6x - 9)] \\(x + 2)(4x - 5) - (x + 2)(6x - 9) &= (x + 2)(4x - 5 - 6x + 9) \\(x + 2)(4x - 5) - (x + 2)(6x - 9) &= (x + 2)(-2x + 4)\end{aligned}$$

$$(x + 2)(4x - 5) - (x + 2)(6x - 9) = (x + 2)[(4x - 5) - (6x - 9)]$$

$$(x + 2)(4x - 5) - (x + 2)(6x - 9) = (x + 2)(4x - 5 - 6x + 9)$$

$$(x + 2)(4x - 5) - (x + 2)(6x - 9) = (x + 2)(-2x + 4)$$

$$(x + 2)(-2x + 4) \neq (x + 2)(-2x - 14)$$

La réponse a est fausse.

$$(x + 2)(4x - 5) - (x + 2)(6x - 9) = (x + 2)[(4x - 5) - (6x - 9)]$$

$$(x + 2)(4x - 5) - (x + 2)(6x - 9) = (x + 2)(4x - 5 - 6x + 9)$$

$$(x + 2)(4x - 5) - (x + 2)(6x - 9) = (x + 2)(-2x + 4)$$

$$(x + 2)(-2x + 4) \neq (x + 2)(-2x - 14)$$

La réponse *a* est fausse.

$$(x + 2)(-2x + 4) = (x + 2)[-2 \times x + (-2) \times (-2)] =$$

$$(x + 2) \times (-2) \times (x - 2) = -2(x + 2)(x - 2)$$

La réponse *b* est vraie.