
Factorisation d'une expression algébrique

Sujets

Déterminez une forme factorisée de chacune des expressions suivantes.

Exercice 1 $A(x) = 9(6 - 10x)(9x + 8) + 7(81x^2 - 64)$.

Exercice 2 $A(x) = -9(-8x - 7)(10 - 4x) - 7(x + 7)(10 - 4x)$.

Exercice 3 $A(x) = 7(-8x - 6)(-8x - 1) + 7(64x^2 - 36)$.

Exercice 4 $A(x) = x^2 - 16x - 6(8 - x)(x + 7) + 64$.

Exercice 5 $A(x) = -2(-9x - 2)(-5x - 3) - 10(-4x - 5)(-5x - 3)$.

Exercice 6 $A(x) = 3(4x^2 - 25) - (-2x - 5)(9 - x)$.

Exercice 7 $A(x) = 2(9x^2 - 18x + 9) - 10(3 - 3x)(4x - 4)$.

Exercice 8 $A(x) = -(-2x - 6)(x + 1) - 10(4x^2 - 36)$.

Exercice 9 $A(x) = -6(9 - 6x)(9 - 5x) - 6(9 - 6x)(x + 10)$.

Exercice 10 $A(x) = 4(-3x - 8)(4x + 7) - 3(1 - 5x)(-3x - 8)$.

Exercice 11 $A(x) = -10(-10x - 1)(2x - 7) - 6(100x^2 - 1)$.

Exercice 12 $A(x) = -6(-2x - 1)(9x - 6) - 4(81x^2 - 36)$.

Exercice 13 $A(x) = 9x^2 - 9(6 - 7x)(2 - 3x) - 4$.

Exercice 14 $A(x) = 4(-9x - 10)(9x - 8) + 10(81x^2 + 180x + 100)$.

Exercice 15 $A(x) = 5(5 - 3x)(4x + 2) - 7(9x^2 - 30x + 25)$.

Exercice 16 $A(x) = 9(6x - 3)(10x + 4) - 8(7 - x)(6x - 3)$.

Exercice 17 $A(x) = 2(25x^2 - 30x + 9) - (5 - 6x)(5x - 3)$.

Exercice 18 $A(x) = 4(4x^2 - 9) - 4(3 - 2x)(6x + 1)$.

Exercice 19 $A(x) = -4(3x - 7)(10x - 8) - 6(9x^2 - 42x + 49)$.

Exercice 20 $A(x) = -2(-5x - 7)(6x + 2) - 8(25x^2 - 49)$.

Solutions

Solution 1 *Pour tout x , $A(x) = -(9x + 8)(27x + 2)$.*

Solution 2 *Pour tout x , $A(x) = -2(2x - 5)(65x + 14)$.*

Solution 3 *Pour tout x , $A(x) = 14(4x + 3)(16x - 5)$.*

Solution 4 *Pour tout x , $A(x) = (x - 8)(7x + 34)$.*

Solution 5 *Pour tout x , $A(x) = -2(5x + 3)(29x + 27)$.*

Solution 6 *Pour tout x , $A(x) = (2x + 5)(5x - 6)$.*

Solution 7 *Pour tout x , $A(x) = 138(x - 1)^2$.*

Solution 8 *Pour tout x , $A(x) = -2(x + 3)(19x - 61)$.*

Solution 9 *Pour tout x , $A(x) = -18(2x - 3)(4x - 19)$.*

Solution 10 *Pour tout x , $A(x) = -(3x + 8)(31x + 25)$.*

Solution 11 *Pour tout x , $A(x) = -8(5x + 8)(10x + 1)$.*

Solution 12 *Pour tout x , $A(x) = -18(3x - 2)(4x + 3)$.*

Solution 13 *Pour tout x , $A(x) = -4(3x - 2)(15x - 14)$.*

Solution 14 *Pour tout x , $A(x) = 6(9x + 10)(9x + 22)$.*

Solution 15 *Pour tout x , $A(x) = -(3x - 5)(41x - 25)$.*

Solution 16 *Pour tout x , $A(x) = 6(2x - 1)(49x - 10)$.*

Solution 17 *Pour tout x , $A(x) = (5x - 3)(16x - 11)$.*

Solution 18 *Pour tout x , $A(x) = 16(2x - 3)(2x + 1)$.*

Solution 19 *Pour tout x , $A(x) = -2(3x - 7)(29x - 37)$.*

Solution 20 *Pour tout x , $A(x) = -4(5x + 7)(7x - 15)$.*