EX 1 Développer et réduire les expressions suivantes.

2N41-6

1. $(x+1)^2$

2. $(x-4)^2$

3. $(x-5)(x+5)$

4. $(x+6)^2$

5. $(x-1)(x+1)$

6. $(x-6)^2$

7. $(x-3)(x+3)$

8. $(x+9)^2$

9. $(x-3)^2$

EX 2 Développer et réduire les expressions suivantes.

2N41-6

1. $(7x+5)^2$

2. $(9x-9)(9x+9)$

3. $(6x-1)^2$

4. $(4x-5)(4x+5)$

5. $(6x-2)^2$

6. $(7x+3)^2$

7. $(7x-6)^2$

8. $(3x+4)^2$

9. $(4x-1)(4x+1)$

EX 3 Factoriser les expressions suivantes.

3L12

$A = 49x^2 - 4$

$B = 81x^2 - 4$

$C = 81x^2 - 9$

$D = 81x^2 - 64$

$E = 16x^2 - 9$

$F = 49x^2 - 64$

$G = 36x^2 - 16$

$H = 49x^2 - 36$

$I = 49x^2 - 81$

$J = 49x^2 - 49$

$K = 64x^2 - 1$

$L = 4x^2 - 16$

MathALEA

Corrections

EX 1

1. $(x+1)^2 = x^2 + 2 \times 1 \times x + 1^2 = x^2 + 2x + 1$

2. $(x-4)^2 = x^2 - 2 \times 4 \times x + 4^2 = x^2 - 8x + 16$

3. $(x-5)(x+5) = x^2 - 5^2 = x^2 - 25$

4. $(x+6)^2 = x^2 + 2 \times 6 \times x + 6^2 = x^2 + 12x + 36$

5. $(x-1)(x+1) = x^2 - 1^2 = x^2 - 1$

6. $(x-6)^2 = x^2 - 2 \times 6 \times x + 6^2 = x^2 - 12x + 36$

7. $(x-3)(x+3) = x^2 - 3^2 = x^2 - 9$

8. $(x+9)^2 = x^2 + 2 \times 9 \times x + 9^2 = x^2 + 18x + 81$

9. $(x-3)^2 = x^2 - 2 \times 3 \times x + 3^2 = x^2 - 6x + 9$

EX 2

1. $(7x+5)^2 = (7x)^2 + 2 \times 7x \times 5 + 5^2 = 49x^2 + 70x + 25$

2. $(9x-9)(9x+9) = (9x)^2 - 9^2 = 81x^2 - 81$

3. $(6x-1)^2 = (6x)^2 - 2 \times 6x \times 1 + 1^2 = 36x^2 - 12x + 1$

4. $(4x-5)(4x+5) = (4x)^2 - 5^2 = 16x^2 - 25$

5. $(6x-2)^2 = (6x)^2 - 2 \times 6x \times 2 + 2^2 = 36x^2 - 24x + 4$

6. $(7x+3)^2 = (7x)^2 + 2 \times 7x \times 3 + 3^2 = 49x^2 + 42x + 9$

7. $(7x-6)^2 = (7x)^2 - 2 \times 7x \times 6 + 6^2 = 49x^2 - 84x + 36$

8. $(3x+4)^2 = (3x)^2 + 2 \times 3x \times 4 + 4^2 = 9x^2 + 24x + 16$

9. $(4x - 1)(4x + 1) = (4x)^2 - 1^2 = 16x^2 - 1$

EX 3

$A = 49x^2 - 4 = (7x)^2 - 2^2 = (7x - 2)(7x + 2)$

$B = 81x^2 - 4 = (9x)^2 - 2^2 = (9x - 2)(9x + 2)$

$C = 81x^2 - 9 = (9x)^2 - 3^2 = (9x - 3)(9x + 3)$

$D = 81x^2 - 64 = (9x)^2 - 8^2 = (9x - 8)(9x + 8)$

$E = 16x^2 - 9 = (4x)^2 - 3^2 = (4x - 3)(4x + 3)$

$F = 49x^2 - 64 = (7x)^2 - 8^2 = (7x - 8)(7x + 8)$

$G = 36x^2 - 16 = (6x)^2 - 4^2 = (6x - 4)(6x + 4)$

$H = 49x^2 - 36 = (7x)^2 - 6^2 = (7x - 6)(7x + 6)$

$I = 49x^2 - 81 = (7x)^2 - 9^2 = (7x - 9)(7x + 9)$

$J = 49x^2 - 49 = (7x)^2 - 7^2 = (7x - 7)(7x + 7)$

$K = 64x^2 - 1 = (8x)^2 - 1^2 = (8x - 1)(8x + 1)$

$L = 4x^2 - 16 = (2x)^2 - 4^2 = (2x - 4)(2x + 4)$