$A' = \frac{1}{15} - \frac{7 \times 1}{15 \times 7 \times 2}$

$= \frac{1 \times 2}{15 \times 2} - \frac{7}{30}$

$= \frac{2}{30} - \frac{7}{30}$

$= -\frac{5}{30}$

$= -\frac{5 \times 1}{5 \times 6}$

$= \boxed{-\frac{1}{6}}$

$B' = \frac{1 + \frac{2}{5}}{3 - \frac{2}{3}}$

$= \frac{\frac{5}{5} + \frac{2}{5}}{\frac{9}{3} - \frac{2}{3}}$

$= \frac{\frac{7}{5}}{\frac{7}{3}}$

$= \frac{7}{5} \times \frac{3}{7}$

$= \boxed{\frac{3}{5}}$

$C' = 2^{-1} + 103^0 - 5^2 - 3^{41} \times 3^{-39} + (2^4)^2 + \frac{3^{41}}{3^{38}}$

$= \frac{1}{2^1} + 1 - 25 - 3^{41+(-39)} + 2^{4 \times 2} + 3^{41-38}$

$= 0,5 - 24 - 3^2 + 2^8 + 3^3$

$= 0,5 - 23,5 - 9 + 256 + 27$

$= -33,5 + 283$

$= \boxed{250,5}$

$D' = 0,042 \times 10^{105}$

$= 4,2 \times 10^{-2} \times 10^{105}$

$= 4,2 \times 10^{-2+105}$

$= \boxed{4,2 \times 10^{107}}$

$E' = 17x^2 + 31x - 50 - 18x^2 - 6x + 7$

$= 17x^2 - 18x^2 + 31x - 6x - 50 + 7$

$= \boxed{-x^2 + 25x - 43}$

$F' = (-3x - 4)(2x - 1)$

$= -6x^2 + 3x - 8x + 4$

$= \boxed{-6x^2 - 5x + 4}$

$G' = (7x - 3)(7x + 3)$

$= (7x)^2 - 3^2$

$= \boxed{49x^2 - 9}$

$H' = (3x + 5)^2$

$= (3x)^2 + 2 \times 3x \times 5 + 5^2$

$= \boxed{9x^2 + 30x + 25}$

$I' = -10 - (3x - 1)(4x - 1)$

$= -10 - (12x^2 - 3x - 4x + 1)$

$= -10 - 12x^2 + 7x - 1$

$= \boxed{-12x^2 + 7x - 11}$

$J' = 7x^2 + x$

$= \boxed{x(7x + 1)}$

$K' = 49x^2 - 100$

$= (7x)^2 - 10^2$

$= \boxed{(7x - 10)(7x + 10)}$

$L = (3x - 2)^2 - 25$

$= [(3x - 2)^2 - 5^2]$

$= [(3x - 2) + 5][(3x - 2) - 5]$

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

$= \boxed{(3x + 3)(3x - 7)}$

$= \boxed{3(x + 1)(3x - 7)}$

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

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

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

$= \boxed{(8x - 3)(7x + 1)}$

- $-5x + 6 = 4x - 1$

$-5x - 4x = -1 - 6$

$-9x = -7$

$x = \frac{-7}{-9}$ $\quad \boxed{x = \frac{7}{9}}$

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

$2x + 6 = 2x + 6$

$0x = 0$ $\quad \boxed{\text{Tout nombre est solution}}$

- $-7x = 0$ $\quad \boxed{x = 0}$

- $(-6x - 1)(x + 13) = 0$

$-6x - 1 = 0$ ou $x + 13 = 0$

$-6x = 1$ $\quad x = -13$

$x = -\frac{1}{6}$ $\quad \boxed{S = \left\{-\frac{1}{6}; -13\right\}}$

- $2x^2 = 3$

$x^2 = \frac{3}{2}$

$x = -\sqrt{\frac{3}{2}}$ ou $x = \sqrt{\frac{3}{2}}$ $\quad \boxed{S = \left\{-\sqrt{\frac{3}{2}}; \sqrt{\frac{3}{2}}\right\}}$

- $18x^2 - 2x = 0$

$2x(9x - 1) = 0$

$2x = 0$ ou $9x - 1 = 0$

$x = 0$ ou $9x = 1$

$x = \frac{1}{9}$

$\boxed{S = \left\{0; \frac{1}{9}\right\}}$

- $5x^2 = 5x$

$5x^2 - 5x = 0$

$5x(x-1) = 0$

$5x = 0 \quad \text{ou} \quad x - 1 = 0$

$x = 0 \qquad x = 1$

$\boxed{S = \{0; 1\}}$

- $(2x+5)^2 - 36 = 0$

$(2x+5) - 6^2 = 0$

$[(2x+5) - 6][(2x+5) + 6] = 0$

$(2x + 5 - 6)(2x + 5 + 6) = 0$

$(2x - 1)(2x + 11) = 0$

$2x - 1 = 0 \quad \text{ou} \quad 2x + 11 = 0$

$2x = 1 \qquad 2x = -11$

$x = \frac{1}{2} \qquad x = -\frac{11}{2}$

$\boxed{S = \left\{-\frac{11}{2}; \frac{1}{2}\right\}}$

- $(3x-1)(2x-7) + (2x+7)(3x-1) = 0$

$(3x-1)[(2x-7) + (2x+7)] = 0$

$(3x-1)(2x - 7 + 2x + 7) = 0$

$4x(3x-1) = 0$

$4x = 0 \quad \text{ou} \quad 3x - 1 = 0$

$x = 0 \qquad 3x = 1$

$x = \frac{1}{3}$

$\boxed{S = \left\{0; \frac{1}{3}\right\}}$