

$$\frac{3m-7}{9} - \frac{4m+1}{6} = \frac{(3m-7)2}{9 \cdot 2} - \frac{(4m+1)3}{6 \cdot 3} = \frac{(3m-7)2 - (4m+1)3}{18} = \frac{(6m-14) - (12m+3)}{18} =$$

$$= \frac{6m-14-12m-3}{18} = \frac{-6m-17}{18} = -\frac{6m+17}{18}$$

$$\frac{-4a+1}{6} + \frac{-2a-1}{10} = -\frac{4a-1}{6} - \frac{2a+1}{10} = -\frac{(4a-1)5}{6 \cdot 5} - \frac{(2a+1)3}{10 \cdot 3} = \frac{-(4a-1)5 - (2a+1)3}{30} = \frac{-(20a-5) - (6a+3)}{30}$$

$$= \frac{-20a+5-6a-3}{30} = \frac{-26a+2}{30} = -\frac{26a-2}{30} = -\frac{2(13a-1)}{30} = -\frac{13a-1}{15}$$

$$\frac{x-2}{x} - \frac{2-x}{y} = \frac{x-2}{x} - \frac{-x+2}{y} = \frac{x-2}{x} + \frac{x-2}{y} = \frac{(x-2)y}{xy} + \frac{(x-2)x}{yx} = \frac{(x-2)y + (x-2)x}{xy} = \frac{(xy-2y) + (x^2-2x)}{xy} =$$

$$= \frac{xy-2y+x^2-2x}{xy} = \frac{x^2+xy-2x-2y}{xy}$$

$$\frac{a-b}{ab} - \frac{a-c}{ac} = \frac{(a-b)c}{abc} - \frac{(a-c)b}{acb} = \frac{(a-b)c - (a-c)b}{abc} = \frac{(ac-bc) - (ab-bc)}{abc} = \frac{ac-bc-ab+bc}{abc} =$$

$$= \frac{ac-ab}{abc} = \frac{-ab+ac}{abc} = -\frac{ab-ac}{abc} = -\frac{(b-c)a}{abc} = -\frac{b-c}{bc}$$

$$\frac{m-n}{mn^2} - \frac{m-2n}{m^3n} = \frac{(m-n)m^2}{m^3n^2} - \frac{(m-2n)n}{m^3n^2} = \frac{(m-n)m^2 - (m-2n)n}{m^3n^2} = \frac{(m^3-m^2n) - (mn-2n^2)}{m^3n^2} =$$

$$= \frac{m^3-m^2n-mn+2n^2}{m^3n^2}$$

$$\frac{1-x}{x^2} + \frac{2y^2-1}{y^3} = \frac{-x+1}{x^2} + \frac{2y^2-1}{y^3} = -\frac{x-1}{x^2} + \frac{2y^2-1}{y^3} = -\frac{(x-1)y^3}{x^2y^3} + \frac{(2y^2-1)x^2}{y^3x^2} = \frac{-(x-1)y^3 + (2y^2-1)x^2}{x^2y^3} =$$

$$= \frac{-(xy^3-y^3) + (2x^2y^2-x^2)}{x^2y^3} = \frac{-xy^3+y^3+2x^2y^2-x^2}{x^2y^3} = \frac{2x^2y^2-xy^3+y^3-x^2}{x^2y^3}$$
