１３５．１次分数関数

(1) $y=\dfrac{2}{x-3}+1$　　(2) $y=-\dfrac{8}{x+1}+8$　　(3) $y=-\dfrac{2}{2x-3}-1$

(4) $y=-\dfrac{3}{x-3}-2$　　(5) $y=-\dfrac{13}{x+3}+2$　　(6) $y=\dfrac{\frac{4}{9}}{x-\frac{2}{3}}-\dfrac{1}{3}$

次の１次分数関数を $y=\dfrac{k}{x-p}+q$ の形に変形せよ。

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

(2) $y=\dfrac{8x}{x+1}=\dfrac{8(x+1)-8}{x+1}=-\dfrac{8}{x+1}+8$

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

(4) $y=\dfrac{2x-3}{3-x}=-\dfrac{2x-3}{x-3}=-\dfrac{2(x-3)+3}{x-3}=-\dfrac{3}{x-3}-2$

(5) $y=\dfrac{2x-7}{x+3}=\dfrac{2(x+3)-13}{x+3}=-\dfrac{13}{x+3}+2$

(6) $y=\dfrac{2-x}{3x-2}=\dfrac{2-x}{3x-2}=-\dfrac{\frac{1}{3}x-\frac{2}{3}}{x-\frac{2}{3}}=-\cdot\dfrac{\frac{1}{3}\left(x-\frac{2}{3}\right)-\frac{4}{9}}{x-\frac{2}{3}}=\dfrac{\frac{4}{9}}{x-\frac{2}{3}}-\dfrac{1}{3}$