

(4) cont

$$y = \frac{\frac{4+7x}{x-1} + 4}{\frac{4+7x}{x-1} - 7} \cdot \frac{x-1}{x-1}$$

$$y = \frac{4+7x+4(x-1)}{4+7x-7(x-1)}$$

$$y = 4+7x+4x-4$$

$$y = \frac{x+7x+4x-x}{4+7x-7x-7}$$

$$y = \frac{7x+4x}{4-7}$$

$$y = \frac{7x+4x}{-3}$$

AAAY

$$(4) \quad x-7 = \frac{y+4}{x-7} \cdot (x-7) \quad \text{if } x \neq 7$$

$$x \neq 7 \Rightarrow x \in (-\infty, 7) \cup (7, \infty)$$

$$\begin{aligned} x-7 &= \frac{y+4}{x-7} \cdot (x-7) \\ x-7 &= y+4 \end{aligned}$$

$$x-7 = y+4$$

$$x(y-7) = y+4$$

$$xy - 7x = y + 4$$

$$\begin{aligned} xy - 7x - y &= 4 \\ +7x \end{aligned}$$

$$\cancel{xy - 7x - 4 = y}$$

$$xy - y = 4 + 7x$$

$$\frac{y(x-1)}{x-1}$$

$$f(x)y = \frac{4+7x}{x-1}$$

$$(3) f(x) = \frac{1}{2}$$

$$f^{-1}(x) = \sqrt[3]{12+2x}$$

$$f^{-1}$$

$$f(x) = \frac{1}{2}y^3 - 6$$

$$6+x = \frac{1}{2}y^3 \cdot 2$$

$$2(6+x) = y^3$$

$$\sqrt[3]{12+2x} = y$$

$$f^{-1} = \sqrt[3]{12+2x}$$

(3.) cont

$$f \circ f^{-1} \quad \frac{1}{2} \sqrt[3]{12+2x}^3 - 6$$

$$\frac{1}{2} 12+2x - 6$$

①

$$6000\left(1 + \frac{0.06}{2}\right)^{2 \cdot 9} = 4214.59$$