

ex. 1 已知  $f(x) \div (ax-b) = Q(x) \dots r$ 1)  $\frac{f(x)}{r(x)}$  of  $f(x) \div (x - \frac{b}{a})$ 

$$g(x) = Q(x) \times a = aQ(x) \#$$

$$r(x) = r \#$$

2)  $\frac{f(x)}{r(x)}$  of  $3f(x) \div (ax-b)$ 

$$g(x) = 3 \cdot Q(x) = 3Q(x) \#$$

$$r(x) = 3 \cdot r = 3r \#$$

3)  $\frac{f(x)}{r(x)}$  of  $xf(x) \div (ax-b)$ 

$$xf(x) = x(ax-b)Q(x) + rx$$

 $rx \neq r(x)$  $\because rx, ax-b$  次数相同

$$rx \div (ax-b) = \frac{r}{a} \dots \frac{rb}{a}$$

$$\Rightarrow \begin{cases} g(x) = xQ(x) + \frac{r}{a} \# \\ r(x) = \frac{rb}{a} \# \end{cases}$$