

4. The function  $f$  is defined by

$$f(x) = \frac{3x - 7}{x - 2} \quad x \in \mathbb{R}, x \neq 2$$

(a) Find  $f^{-1}(7)$

**(2)**

(b) Show that  $ff(x) = \frac{ax + b}{x - 3}$  where  $a$  and  $b$  are integers to be found.

**(3)**