

**6** The function  $f$  is defined by  $f : x \mapsto \frac{x+3}{2x-1}$ ,  $x \in \mathbb{R}$ ,  $x \neq \frac{1}{2}$ .

**(i)** Show that  $ff(x) = x$ . [3]

**(ii)** Hence, or otherwise, obtain an expression for  $f^{-1}(x)$ . [2]