

**5** The function  $f$  is defined by

$$f : x \mapsto x^2 + 1 \text{ for } x \geq 0.$$

**(i)** Define in a similar way the inverse function  $f^{-1}$ . [3]

**(ii)** Solve the equation  $ff(x) = \frac{185}{16}$ . [3]