

(i) Find an expression for $f^{-1}(x)$. [3]

[3]

[illegible]

The function g is defined by $g : x \mapsto 4x + a$ for $x \in \mathbb{R}$, where a is a constant.

- (ii) Find the value of a for which $gf(-1) = 3$. [3]

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- (iii)** Find the possible values of a given that the equation $f^{-1}(x) = g^{-1}(x)$ has two equal roots. [4]

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