

5. Functions f and g are given by $f(x) = x^2 - 2$ and $g(x) = 3x + 5$, $x \in \mathbb{R}$.

(a) Find expressions for:

(i) $f(g(x))$ and

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(ii) $g(f(x))$.

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(b) Determine the range of values of x for which $f(g(x)) < g(f(x))$.

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