



FUNCTIONS

INVERSE FUNCTIONS

Ref: G283. **3E1**

A1 $f(x) = 1 - x$ Express the inverse function f^{-1} in the form $f^{-1}(x) = \dots$	A2 $g(x) = 1 - 2x$ Express the inverse function g^{-1} in the form $g^{-1}(x) = \dots$	A3 $h(x) = 1 - \sqrt{x}$ Express the inverse function h^{-1} in the form $h^{-1}(x) = \dots$	A4 $f(x) = \sqrt{1 - x}$ Express the inverse function f^{-1} in the form $f^{-1}(x) = \dots$
B1 $f(x) = \frac{1}{x}$ Find $f^{-1}(x)$	B2 $f(x) = \frac{2}{x}$ Find $f^{-1}(x)$	B3 $f(x) = \frac{2}{x+1}$ Find $f^{-1}(x)$	B4 $g(x) = \frac{1}{x} + 2$ Find $g^{-1}(x)$
C1 $f(x) = \frac{x+1}{x}$ Find $f^{-1}(x)$	C2 $f(x) = \frac{x}{x+1}$ Find $f^{-1}(x)$	C3 $f(x) = \frac{2x}{x-1}$ Find $f^{-1}(x)$	C4 $h(x) = \frac{x+2}{x-1}$ Find $h^{-1}(x)$
D1 $g(x) = \frac{2x-1}{x}$ Find $g^{-1}(x)$	D2 $f(x) = \frac{x}{2x-1}$ Find $f^{-1}(x)$	D3 $h(x) = \frac{2x}{1-x}$ Find $h^{-1}(x)$	D4 $f(x) = \frac{x+1}{2x-3}$ Find $f^{-1}(x)$



FUNCTIONS INVERSE FUNCTIONS

EXTRA QUESTION: WHAT IS SPECIAL ABOUT THE ANSWERS TO:
A1, B1, B2, C4 and D2 ?

Ref: G238. **3E1**

<p>A1</p> $f(x) = 1 - x \quad f^{-1}(x) = 1 - x$ <p>Express the inverse function f^{-1} in the form $f^{-1}(x) = \dots$</p>	<p>A2</p> $g(x) = 1 - 2x \quad g^{-1}(x) = \frac{1 - x}{2}$ <p>Express the inverse function g^{-1} in the form $g^{-1}(x) = \dots$</p>	<p>A3</p> $h(x) = 1 - \sqrt{x} \quad h^{-1}(x) = (1 - x)^2$ <p>Express the inverse function h^{-1} in the form $h^{-1}(x) = \dots$</p>	<p>A4</p> $f(x) = \sqrt{1 - x} \quad f^{-1}(x) = 1 - x^2$ <p>Express the inverse function f^{-1} in the form $f^{-1}(x) = \dots$</p>
<p>B1</p> $f(x) = \frac{1}{x}$ <p>Find $f^{-1}(x) = \frac{1}{x}$</p>	<p>B2</p> $f(x) = \frac{2}{x}$ <p>Find $f^{-1}(x) = \frac{2}{x}$</p>	<p>B3</p> $f(x) = \frac{2}{x + 1}$ <p>Find $f^{-1}(x) = \frac{2 - x}{x}$</p>	<p>B4</p> $g(x) = \frac{1}{x} + 2$ <p>Find $g^{-1}(x) = \frac{1}{x - 2}$</p>
<p>C1</p> $f(x) = \frac{x + 1}{x}$ <p>Find $f^{-1}(x) = \frac{1}{x - 1}$</p>	<p>C2</p> $f(x) = \frac{x}{x + 1}$ <p>Find $f^{-1}(x) = \frac{x}{1 - x}$</p>	<p>C3</p> $f(x) = \frac{2x}{x - 1}$ <p>Find $f^{-1}(x) = \frac{x}{x - 2}$</p>	<p>C4</p> $h(x) = \frac{x + 2}{x - 1}$ <p>Find $h^{-1}(x) = \frac{x + 2}{x - 1}$</p>
<p>D1</p> $g(x) = \frac{2x - 1}{x}$ <p>Find $g^{-1}(x) = \frac{1}{2 - x}$</p>	<p>D2</p> $f(x) = \frac{x}{2x - 1}$ <p>Find $f^{-1}(x) = \frac{x}{2x - 1}$</p>	<p>D3</p> $h(x) = \frac{2x}{1 - x}$ <p>Find $h^{-1}(x) = \frac{x}{x + 2}$</p>	<p>D4</p> $f(x) = \frac{x + 1}{2x - 3}$ <p>Find $f^{-1}(x) = \frac{3x + 1}{2x - 1}$</p>