

Inverse of Functions

1) If $f(x) = 10^x$ and $g(x) = \log_{10} 10x$, then evaluate

i) $(f \circ g)(x) =$ _____ ii) $(g \circ f)(x) =$ _____

iii) Are the functions $f(x)$ and $g(x)$ inverses? _____

2) If $f(x) = \left(\frac{x+9}{5}\right)^{\frac{1}{5}}$ and $g(x) = 5x^5 - 9$, then evaluate

i) $(f \circ g)(x) =$ _____

iii) Are the functions

PREVIEW
Gain complete access to the largest
collection of worksheets in all subjects!

3) Determine algebraically whether each other.

are inverses of

Members, please
log in to
download this
worksheet.

Not a member?
Please sign up to
gain complete
access.

www.mathworksheets4kids.com

4) Determine algebraically whether $f(x) = 2x + 11$ and $g(x) = -1 - 11x$ are inverses of each other.

Inverse of Functions

1) If $f(x) = 10^x$ and $g(x) = \log_{10} 10x$, then evaluate

i) $(f \circ g)(x) =$ 10x

ii) $(g \circ f)(x) =$ x + 1

iii) Are the functions $f(x)$ and $g(x)$ inverses? No

2) If $f(x) = \left(\frac{x+9}{5}\right)^{\frac{1}{5}}$ and $g(x) = 5x^5 - 9$, then evaluate

i) $(f \circ g)(x) =$ _____

x

iii) Are the functions _____

PREVIEW

Gain complete access to the largest
collection of worksheets in all subjects!

3) Determine algebraically whether _____ are inverses of each other.

_____ are inverses of

Members, please
log in to
download this
worksheet.

Not a member?
Please sign up to
gain complete
access.

www.mathworksheets4kids.com

4) Determine algebraically whether $f(x) = 2x + 11$ and $g(x) = -1 - 11x$ are inverses of each other.

$$(f \circ g)(x) = -22x + 9$$

$$(g \circ f)(x) = -22x - 122$$

$$(f \circ g)(x) \neq (g \circ f)(x) \neq x$$

$f(x)$ and $g(x)$ are not inverses of each other.