

MasterMath

Algebra

# Functions

This slide features a blackboard background with the text 'Algebra' and 'Functions'. The 'MasterMath' logo is in the top right, and a grassy field is at the bottom.

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## Relationship

5'1" tall  $\neq$  12 years old

## Function

3 hours of lawn mowing = \$15

Functions

This slide illustrates the difference between a relationship and a function. The 'Relationship' section shows a scatter plot of height vs age with the text '5'1" tall  $\neq$  12 years old'. The 'Function' section shows a scatter plot of money vs hours of lawn mowing with the text '3 hours of lawn mowing = \$15'. Both plots show a clear linear trend.

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Input Value, "x"

Function, " $y = 5x$ "

Output Value, "y"

Output Value

Functions

This slide shows a diagram of a lawnmower. An arrow points from the text 'Input Value, "x"' to the lawnmower, and another arrow points from the lawnmower to the text 'Output Value, "y"'. The function equation  $y = 5x$  is shown between the two arrows.

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3 hour

Function, "y = 5x"


Solutions to the function:

(3, 15)  
(4, 20)  
(5, 25)

3 hour

Evaluate the function for 3

$y = 5(3)$   
 $y = 15$



Functions

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You and your family take a trip to the zoo in Zibuta. You're looking forward to seeing their new zebra exhibit. It's 162 miles from your house to the zoo, and your Dad says you'll drive at an average speed of 36 MPH. How long will it take you to get to the zoo?



162 36 y

= ÷

Functions

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# Functions

**YOU TRY IT**

Hit your Pause Key, try the problem, then hit your Forward Key to move to the answer.

You discover that the more you practice on the piano, the better you become. Is this a relationship? Is it a function?

You try it!

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# Functions


**YOU TRY IT**

More practice results in improvement, so there is a relationship.

You discover that the more you practice on the piano, the better you become. Is this a relationship? Is it a function?

You try it!

You can't say that "x" hours of practice results in "y" improvement, so this is not a function



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# Functions

**YOU TRY IT**

Hit your Pause Key, try the problem, then hit your Forward Key to move to the answer.

It costs \$1.99 each to buy download songs at Download World. Can you create a function to determine how much you would pay for any number of downloads?

You try it!

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# Functions

**YOU TRY IT**

1.99 x y = + - \*

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