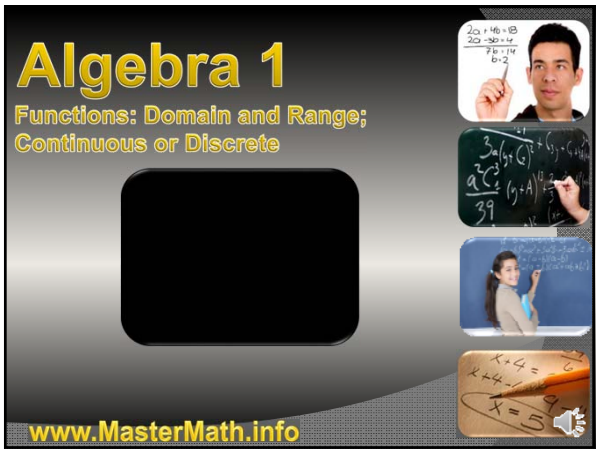
Algebra 1
Functions: Domain and Range;
Continuous or Discrete
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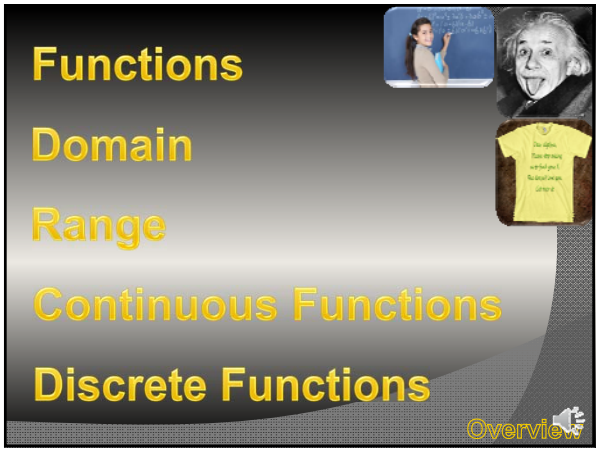
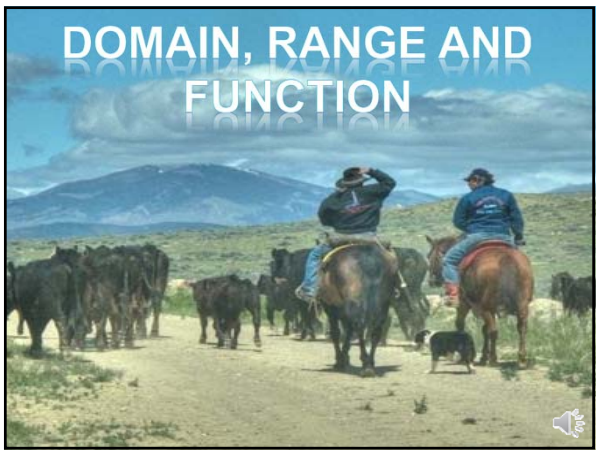
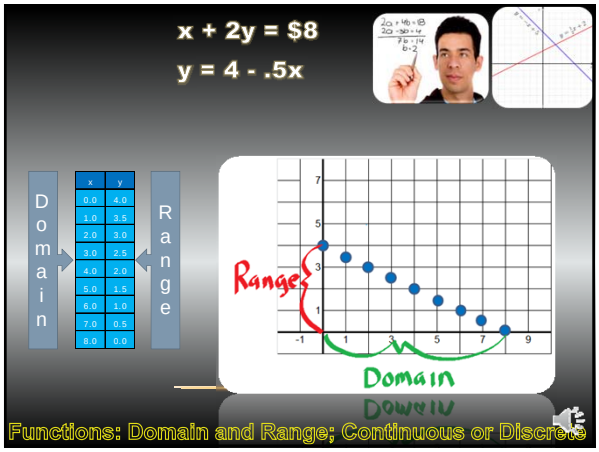
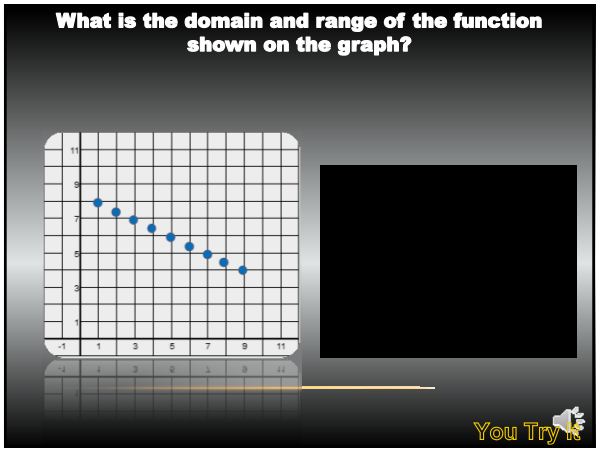
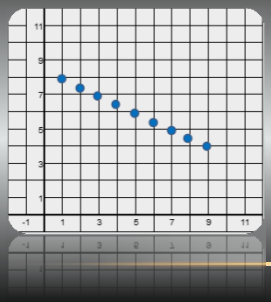

Functions
Domain
Range
Continuous Functions
Discrete Functions
Overview


DOMAIN, RANGE AND
FUNCTION


x + 2y = $8
y = 4 - .5x
Domain
Range
Range
Domain
Functions: Domain and Range; Continuous or Discrete


What is the domain and range of the function shown on the graph?
You Try It

**What is the domain and range of the function shown on the graph?**



Domain:
1,2,3,4,5,6,7,8,9

Range:
4, 4.5, 5, 5.5, 6, 6.5, 7, 7.5, 8

You Try it

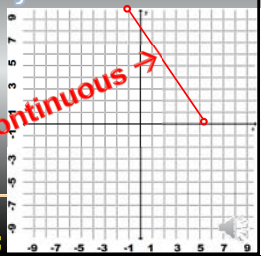
| x | y |
|---|---|
| -1 | 10 |
| -0.5 | 9.25 |
| 0 | 8.5 |
| 0.5 | 7.75 |
| 1 | 7 |
| 1.5 | 6.25 |
| 2 | 5.5 |
| 2.5 | 4.75 |
| 3 | 4 |
| 3.5 | 3.25 |
| 4 | 2.5 |
| 4.5 | 1.75 |
| 5 | 1 |
| 5.5 | 0.25 |

$3x + 2y = 17$

$y = -1.5x + 8.5$

domain = $-1 < x < 5.5$

range = $.25 < y < 10$



Continuous →

Functions: Domain and Range;

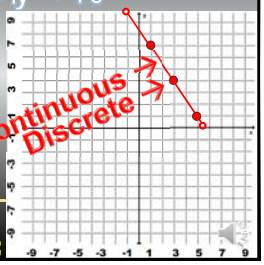
| x | y |
|---|---|
| | |
| | |
| 0 | |
| | |
| 1 | 7 |
| | |
| 2 | |
| | |
| 3 | 4 |
| | |
| 4 | |
| | |
| 5 | 1 |
| | |

$3x + 2y = 17$

$y = -1.5x + 8.5$

domain = 0, 1, 2, 3, 4, 5

range = $2.5 < y < 10$



Continuous →
Discrete →

x = number of


y = number of


Functions: Domain and Range;

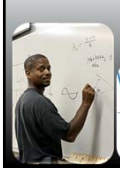
The number of cans of tomatoes (x) and cans of potatoes (y) you can buy for $20 is represented by the equation 4y + 2x = $20. Write the equation in function form, then create a table showing the domain and range. Is the function discrete or continuous?

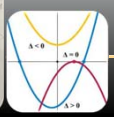

You Try It

The number of cans of tomatoes (x) and cans of potatoes (y) you can buy for $20 is represented by the equation 4y + 2x = $20. Write the equation in function form, then create a table showing the domain and range. Is the function discrete or continuous?

4y + 2x = $20

4y = $20 – 2x
y = $5 - .5x



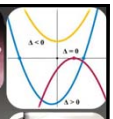


Domain

Range

| x | y |
|---|---|
| 0.0 | 5.0 |
| 2.0 | 4.0 |
| 4.0 | 3.0 |
| 6.0 | 2.0 |
| 8.0 | 1.0 |
| 10.0 | 0.0 |

You Try It

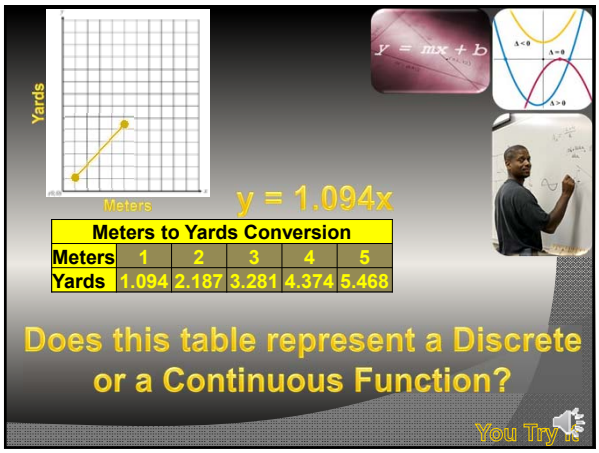



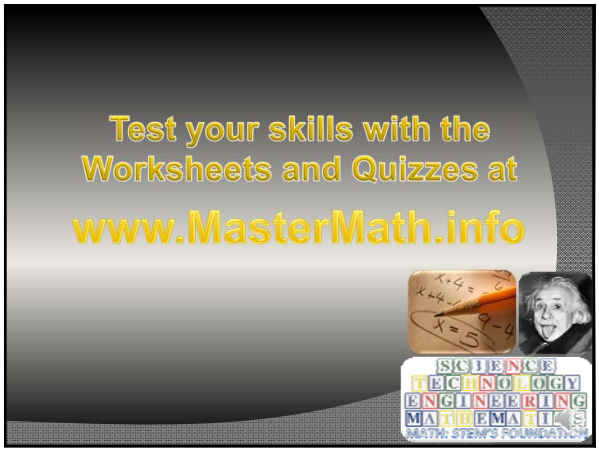
y = 1.094x

| Meters to Yards Conversion | | | | | |
|---|---|---|---|---|---|
| Meters | 1 | 2 | 3 | 4 | 5 |
| Yards | 1.094 | 2.187 | 3.281 | 4.374 | 5.468 |

Does this table represent a Discrete or a Continuous Function?

You Try It


Yards
Meters
y = 1.094x
Meters to Yards Conversion
Meters 1 2 3 4 5
Yards 1.094 2.187 3.281 4.374 5.468
Does this table represent a Discrete or a Continuous Function?
You Try It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