

MasterMath

Name _____

Functions: Domain and Range; Continuous or Discrete

Date _____

1. Please convert these equations to function form:

equation	function
$y - 5x = -6$	$y = 5x - 6$
$2x + 4y = 8$	$y = 2 - .5x$
$x - y = 3$	$y = x - 3$
$16 - 2y = x$	$y = 8 - \frac{1}{2}x$
$(x \div y) = 2$	$y = x \div 2$

2. Jorge's service club is raising money by wrapping presents in the mall. The function $y = 3x$ describes the amount of money, in dollars, the club will earn for wrapping x presents. They only have enough wrapping paper to wrap 1000 presents. Based upon these facts, answer the questions below:



Question	Answer
What's the domain?	$0 \leq x \leq 1000$
What's the range?	$0 \leq y \leq 3000$
Is the function continuous or discrete?	discrete

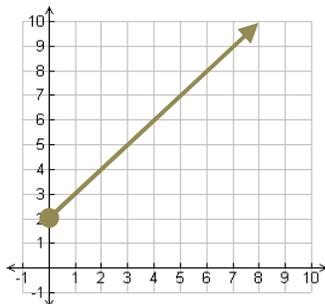
3. Ginger had a summer job that pays \$7.00 an hour and she worked between 15 and 35 hours every week. Her weekly salary can be modeled by the equation: $S = 7h$, where S is her weekly salary and h is the number of hours she worked in a week. Based upon these facts, answer the questions below:

Question	Answer
What's the domain?	$15 \leq h \leq 35$
What's the range?	$\$105 \leq y \leq \245
Is the function continuous or discrete?	continuous

4. A movie theater seats 200 people. For any particular show, the amount of money the theater makes is a function of the number of people, n , in attendance. If a ticket costs \$4.00, write an equation in function form that could be used to calculate the amount of money the theater makes, R , for any number of people in attendance, and find the domain and range of this function.

Question	Answer
function	$R = 4n$
domain	$0 \leq n \leq 200$
range	$0 \leq R \leq 800$

5. What is the domain and the range of the function shown on this coordinate plane?



Domain	$x \geq 0$
Range	$y \geq 2$