**Assignment 2: Domain and Range, Functions and Relation Terminology Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Give the domain and range for each in indicated forms (number lines, set notation and/or interval notation). ( /26)** D: D:

1) 2)

 Set notation: Set notation:

 Interval notation:

 R:

 R:

 Set notation:

 Set notation:

 Interval notation:



3) D: 4) D:

 Set notation: Interval notation:

 R: R:

 Set notation: Interval notation:

 D: D:

(-1, 3)

5) 6)

 Interval notation: Set notation:

 R: R:

 Interval notation: Set notation:

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| **Write the domain and range of each. Tell if the relation is a function or not! /6** |
| {(5, 2), (–3, 1), (5, –4), (0, 11)} | {(–6, –8), (5, 1), (9, –4), (7, 1), (15, 0)} |
| Domain:Range: | Domain:Range: |
| Function: yes or No (circle one) | Function: yes or No (circle one) |

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| **Graph 1 /8** | 1. For Graph 1 check all descriptions that apply to the graph. /4
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| **Z** 1 5  **X**  1. Use the graph to find f(4). Show work on graph to find value!  f(4) = /2
 | 1. If f(x) = 5, use the graph to find the value(s) of x. Show work on the graph!

 x = /2 |
|  |  |
| **Graph 2**  **/5**3. Check all that apply to graph 2. /3 | 1. Which inequality correctly shows the range of Graph 2? \_\_\_\_\_\_\_\_\_\_\_\_1. $2\leq y\geq -4$
2. $-4\geq y\geq 2$
3. $-4\leq y\leq 2$
4. $2\geq y\leq -4$

 /12. Which interval notation best describes the domain of Graph 2? \_\_\_\_\_\_\_\_\_\_\_\_1. $\left[-3, 3\right]$
2. $\left(-3, 3\right)$
3. $\left[-4, 3\right] $
4. $\left(-4, 3\right)$  /1
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| **Graph 3: /7** 1. Label each point shown on the graph. i.e. (-1, 2)

**( /3)**1. Complete the number line to represent the domain of this relation.
 | 1. The range of this graph is correctly written as ? Choose one response:

1. Is this data continuous or discrete? Explain how you know? **( /2)**
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| **Graph 4: Show work on graph for #3, 4.** **/8** | 1. What is the domain and range in interval notation? /2
2. What is the domain and range in set notation? /2
3. What is f (-2) = ? /2
4. What is x if f(x) = 0 ?/2

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**Total: /60 marks \_\_\_\_\_\_\_\_%**