**5.5-5.6 Review WS**

1. Let  and let . Perform the indicated operations, then state the domain of the resulting rule.

|  |  |  |
| --- | --- | --- |
| A.   | B.   | C.  |

2. A mapping diagram can be used to represent relations. An arrow is drawn from each input to its output.

A. Fill in the mapping diagram below given that  and  are *inverse relations*.

|  |  |  |  |
| --- | --- | --- | --- |
| *y1*-8415173*x*1471133 |  | *y2*413*x*-8173 |  |

B. Is *y*1 a function? Is *y*2 a function?

C. If you are given a graph of a function, how can you tell if its inverse will be a function?

3. Algebraically show the pairs of functions below are inverses of each other.

|  |  |
| --- | --- |
| A. ;   | B. ;  |

4. Find the following below, given ,, , **Write the domain and range of the resulting relations for problems A-D.**

|  |  |
| --- | --- |
| A.   | B.  |
| C.   | D.  |
| E.  | F.   |

5. Use the table, graph, and equations  and  to answer the questions below.

 a) 

 b) 

 c) 

 d) 

 e) all  such that 