Problem 1:

0.1f. If n is an integer than n = n + 1 is an empty set.

0.1e. If w is a string of 0’s and 1’s and w equals the reverse of w. Then w would be the set of palindromes over a binary alphabet.

0.6d.The set of all possible dependent values and outputs of a function is Range. The set of all possible inputs to a function is Domain.

Therefore, Range of (g) is:{6,7,8,9,10}

the Domain of g(i,j)

X={1,2,3,4,5}

Y={6,7,8,9,10}

Domain D= X\*Y

={(1,6),(1,7),(1,8),(1,9),(1,10),(2,6),(2,7),(2,8),

(2,9),(2,10),(3,6),(3,7),(3,8),(3,9),(3,10),(4,6),

(4,7),(4,8),(4,9),(4,10,(5,6),(5,7),(5,8),(5,9),(5,10)}

0.6e.If f is a function in the form of f(a)=b, then b is the output value when the input value is a.

The value of the function f at n = 4 is 7, which is f(4) = 7

The value of function g(4,f(4)) = g(4,7)

=8







