## Algebra and Representation HW #11 Tabular Representations of Functions

1. What are the domain and range of the function *f* given by the following table?

x	1	2.5	3.7	4.2	15	26	37	84	95	102
f(x)	12	$\pi$	3.7	18	-2	3.5	12	32	212	1/4

2. Give a table representation for the function g that assigns to each of the counting numbers n from 1 to 10 the sum of the first n odd counting numbers.

n	1	2	3	4	5	6	7	8	9	10
g(n)										

3. Give a table representation for the function A that assigns to each of the counting numbers r from 1 to 10 the area of a circle of radius r. (Give **exact** values of the function in terms of  $\pi$ ; for example,  $A(2) = 4\pi$ .)

r	1	2	3	4	5	6	7	8	9	10
A(r)										

4. What are some of the advantages and some of the disadvantages of giving a tabular representation of a function? In what situations might it be preferable to other types of representations?