

Work Sheet 8

Grades on the First Exam.

Here is the information on the first test. 56 people took the exam. The high score were 105 (9 people got this score). The low scores were 67, 65, 52, 36, 32, and 27. The average was 87.41 with a standard deviation of 18.67. The median was 92. The break down in the grades is in the table.

Grade	Range	Number	Percent
A	90–100	36	64.29%
B	80–89	6	10.71%
C	70–79	7	12.50%
D	60–69	4	7.14%
F	0–59	4	7.14%

Warning.

This exam was the easiest one of the term. Therefore if you did not do well on it you are in trouble. The last day to drop the class without getting a WF is Thursday, October 2. Judging from what I have seen in past classes, *anyone who got below 70 on this exam is very likely better off dropping the course now.*

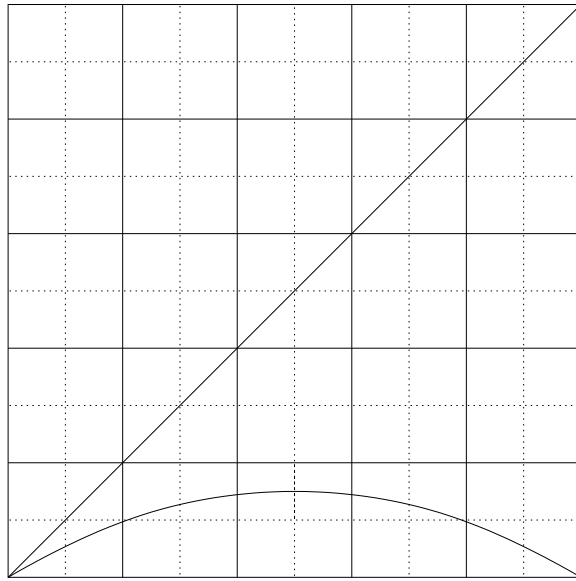


FIGURE 1

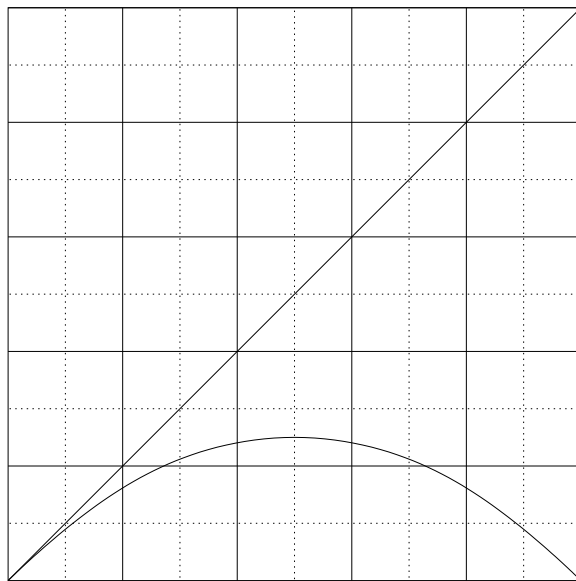


FIGURE 2

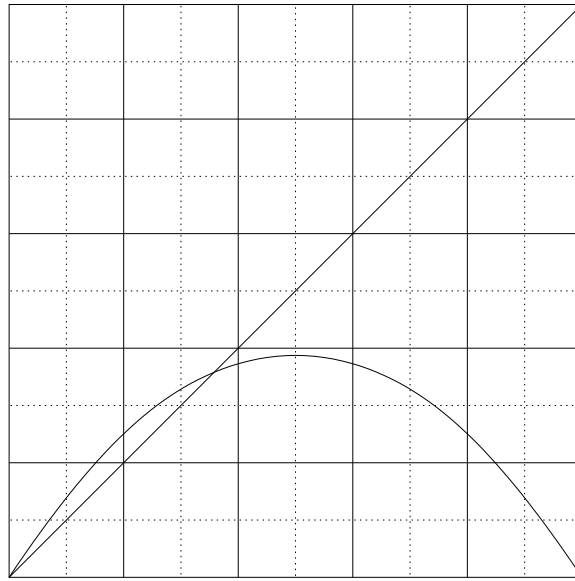


FIGURE 3

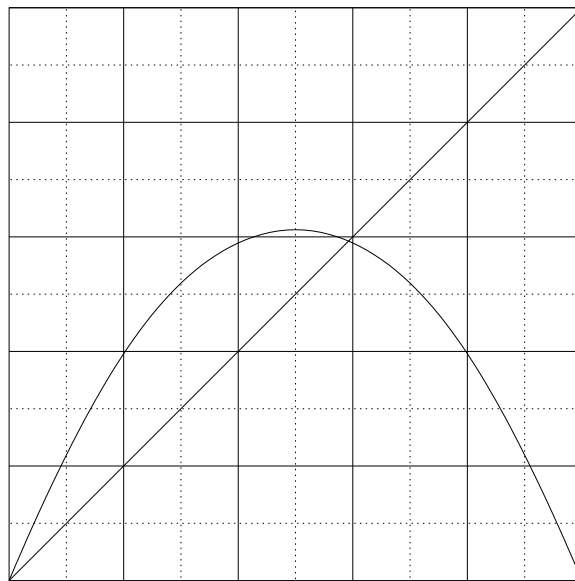


FIGURE 4

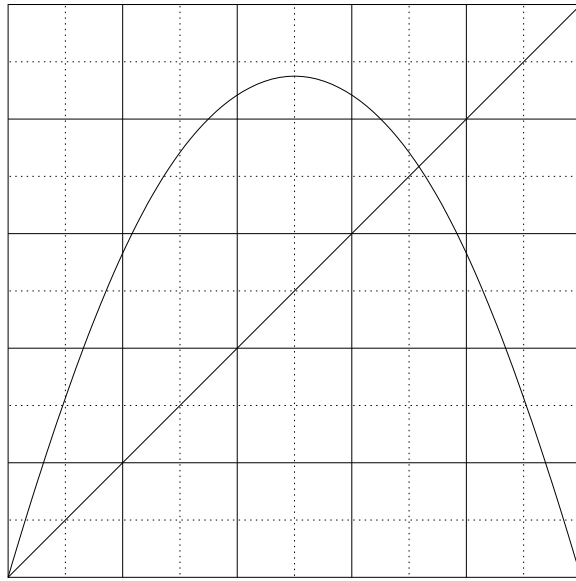


FIGURE 5

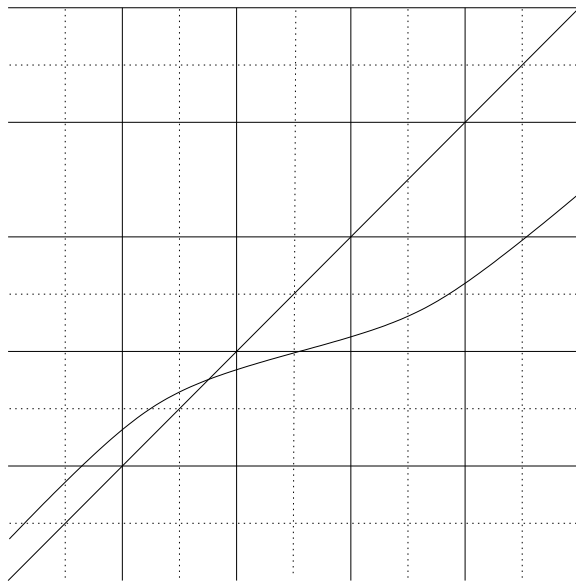


FIGURE 6

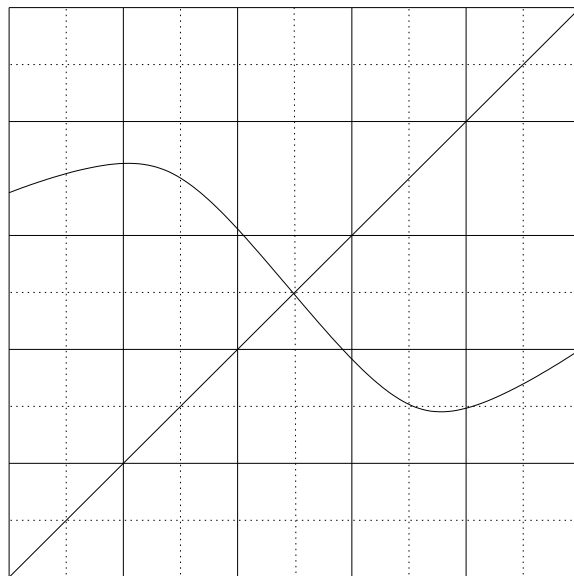


FIGURE 7

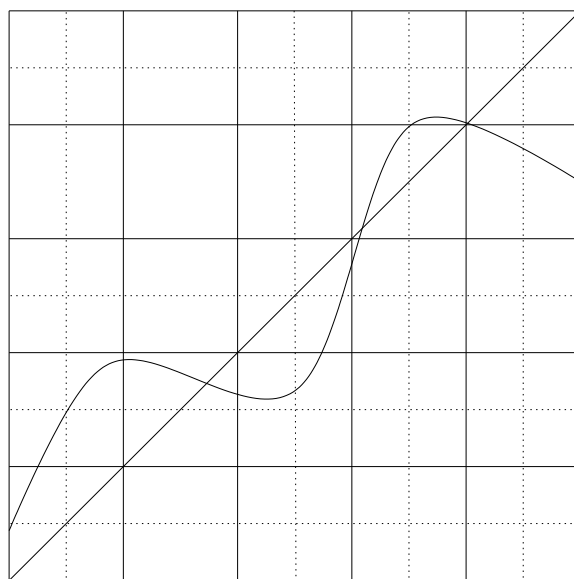


FIGURE 8

In a discrete dynamical system $N_{t+1} = f(N_t)$ the *equilibrium points* (also called a *stationary point* or a *rest point*), N_* , are the points solutions to $f(N) = N$. If $|f'(N_*)| < 1$, then it is a *stable* (or *attracting*) equilibrium points. If $|f'(N_*)| > 1$ it is *unstable* (or *repelling*).