## **AFM Piecewise**

## Independent & Dependent Variables

Identify the independent and dependent variables.

- A study was conducted to determine the relationship between the length, in dm, of an ear of corn and the amount, in tons per acre, of fertilizer used.
- 2. Ann Wilders has determined that the cost, in dollars, of stuffing envelopes for a customer is a function of the number of envelopes to be stuffed.
- 3. The National Highway Traffic Safety Administration has collected data on the percent of alcohol-related traffic deaths in the US over the period of 1982 to 1993.

time

4. The National Cable Television Association has tracked the approximate average monthly rate, in dollars, for basic cable subscribers between the years 1990 and 1993.

time

- 5. A study was conducted to track the amount of alcohol in the bloodstream, in oz/ml, over the 12 hour period following alcohol consumption.
- 6. The stopping distance, in feet, of an automobile is determined by the speed of the vehicle, in miles per hour.
- 7. The population P of a certain mammal, in hundreds, depends on the number, in hundreds, of a smaller mammal that serves as its primary food supply.
- 8. The number, in hundreds, of the smaller mammal depends upon the amount, in pounds per acre, of its food supply, a type of plant.
- 9. The total numbers of multimedia personal computers in US homes for the years 1992 1996 are given in the table. (Numbers are in millions)

Year	1992	1993	1994	1995	1996	
# of PCs	.47	1.98	3.63	5.58	7.98	

10. Sales, in thousands of dollars, of a certain company are shown below.

Year	0	1	2	3	4	
Sales	48	59	66	75	80	

11. The table lists the total federal debt, in billions of dollars, from 1985 to 1989.

Year	1985	1986	1987	1988	1989
Federal Debt	1828	2130	2354	2615	2881