TATS

2C 2.2

Take Scatter Plots for the following tables
n graph paper. Use a straight edge.

① **MULTIPLE REPRESENTATIONS** The table shows the number of U.S. households with personal computers (PCs) from 1994 to 2002.

Year	1994	1995	1996	1997	1998	1999	2000	2001	2002
Households with PCs (millions)	32.0	33.6	38.8	44.0	51.2	61.1	66.0	69.1	72.7

② **ALLIGATORS** The table shows the weights of two alligators at various times during a feeding trial. Make two scatter plots, one for each alligator, where x is the number of weeks and y is the weight of the alligator. Draw lines of fit for both scatter plots. Compare the approximate growth rates.

Weeks	0	9	18	27	34	43	49
Alligator 1 weight (pounds)	6	8.6	10	13.6	15	17.2	19.8
Alligator 2 weight (pounds)	6	9.2	12.8	13.6	20.2	21.4	24.3

③ **GEOLOGY** The table shows the duration of several eruptions of the geyser Old Faithful and the interval between eruptions. Write an equation that models the interval as a function of an eruption's duration.

Duration (minutes)	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0
Interval (minutes)	50	57	65	71	76	82	89	95

④ **FARMING** The table shows the living space recommended for pigs of certain weights.

Weight (pounds)	40	60	80	100	120	150	230
Area (square feet)	2.5	3	3.5	4	5	6	8

(over)

Make a time series chart for each of the following. Use a straightedge + graph paper.

⑤ . **TELEVISION STATIONS** The table shows the number of UHF and VHF broadcast television stations each year from 1996 to 2002.

Year	1996	1997	1998	1999	2000	2001	2002
Television stations	1551	1563	1583	1616	1730	1686	1714

⑥ **DAYLIGHT** The table shows the number of hours and minutes of daylight in Baltimore, Maryland, for ten days in January.

Day in January	5	6	7	8	9	10	11	12	13	14
Daylight (hours and minutes)	9:30	9:31	9:32	9:34	9:35	9:36	9:37	9:38	9:40	9:41

⑦ **BIRD POPULATIONS** The table shows the number of active red-cockaded woodpecker clusters in a part of the De Soto National Forest in Mississippi. Write an equation that models the number of active clusters as a function of the number of years since 1990.

Year	1992	1993	1994	1995	1996	1997	1998	1999	2000
Active clusters	22	24	27	27	34	40	42	45	51

⑧ **CHALLENGE** The table shows the estimated amount of time and the estimated amount of money the average person in the U.S. spent on the Internet each year from 1999 to 2005.

Year	1999	2000	2001	2002	2003	2004	2005
Internet time (hours)				154	169	182	193
Internet spending (dollars)	40.55	49.64	68.70	84.73	97.76	110.46	122.67