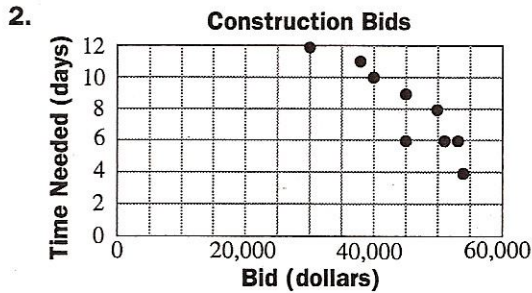
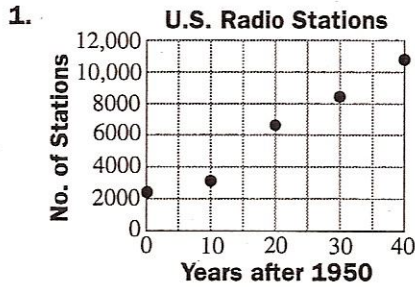


Practice 6

FOR USE WITH SECTION 3.6

Find an equation that models the data in each scatter plot.



3. The following table lists the wind-chill factor, an indication of how cold it feels outdoors, for various temperatures (in °F) when a 15 mi/h wind is blowing.

Actual Air Temperature	-5	0	5	10	15	20	25
Wind-chill Factor	-38	-31	-25	-18	-11	-5	2

- Make a scatter plot of the data.
 - Draw a line of fit on your scatter plot.
 - Find an equation of your line of fit.
 - Use your line of fit to predict the wind-chill factor when the actual air temperature is 35° and a 15 mi/h wind is blowing.
4. The table below lists the amounts of oil the U. S. imported in recent years, in millions of barrels per day.

Year	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Total Imports	4715	4286	5439	5914	6587	7202	7161	6626	6938	7618

- Make a scatter plot of the data.
 - Draw a line of fit on your scatter plot.
 - Find an equation of your line of fit.
 - Use your line of fit to predict the amount of oil the U. S. imported in 1994. Why do you think this number might differ from the actual amount?
5. **Writing** Suppose you changed the horizontal scale in Exercise 1 so that it gave the actual year numbers, rather than “years after 1950.” In the equation $y = mx + b$, would either or both of the numbers m and b change? Explain.