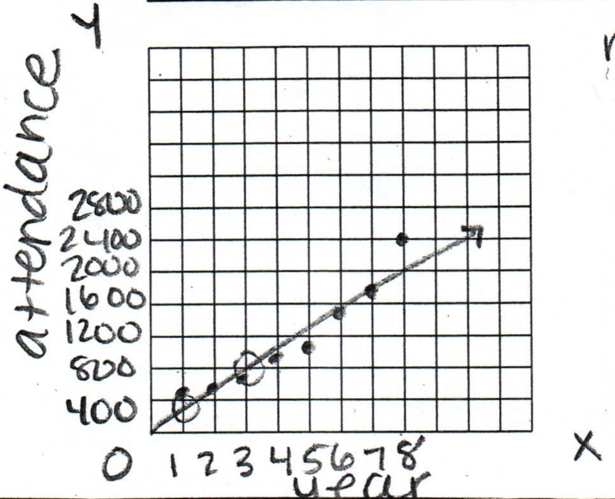
Try It

3. The table shows the numbers of people who attend a festival over an eight-year period. (a) Make a scatter plot of the data and draw a line of fit. (b) Write an equation of the line of fit. (c) Interpret the slope and the y-intercept of the line of fit.

Year, x	1	2	3	4	5	6	7	8
Attendance, y	420	500	650	900	1100	1500	1750	2400



$m = \frac{400}{2} = 200$

$y = 200x$

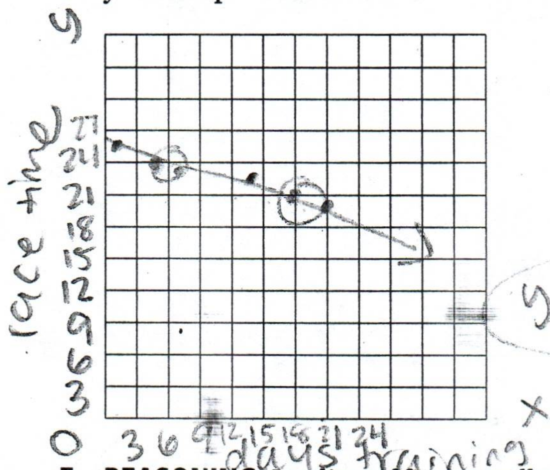
The attendance increases about 200 each year.

In-Class Practice

1 I don't understand yet. 2 I can do it with help. 3 I can do it on my own. 4 I can teach someone else.

4. **FINDING A LINE OF FIT** The table shows the numbers of days spent training and the race times for several people in a race. (a) Make a scatter plot of the data and draw a line of fit. (b) Write an equation of the line of fit. (c) Interpret the slope and the y-intercept of the line of fit.

Days Training, x	Race Time (minutes), y
2	25.45
14	22.30
7	23.85
5	24.10
21	20.90
18	21.20



$\frac{-3}{12}$

$y = -\frac{1}{4}x + 26$

A person who trains 0 days races in 26 min.

The time decreases $\frac{1}{4}$ min each day you train.

5. **REASONING** Is a line of fit generally closer to the data points representing a *strong* linear relationship or a *weak* linear relationship? Explain.

strong points will fall far from the line