9. No; Answers may vary. Sample: You need to select two points that lie on the trend line. These points may or may not be given data points.
10. The slope is positive. The slope is negative.
11. Although $y$ is increasing, $x$ is decreasing, so the data show negative correlation.
12. No; Answers may vary. Sample: The data show no association. A trend line should show the general direction of the data in a scatter plot. If a scatter plot shows no association, there is no general direction of the data, so a trend line is not a good choice for modeling the data.
13. Answers may vary. Sample: A data set where, as $x$-values increase, $y$-values stay constant. While these data would show neither a positive nor negative association, a constant trend line would be valid.
14. The $y$-intercept tells you the value at $x=0$, or the initial value. Interpreting this value in context can help you decide whether a linear model makes sense.
15. negative
16. positive
17. 



The data show a positive correlation.
18.


The data show a negative correlation.
19.


The data show no association.
20.


The equation of the trend line is $y=0.8 x+1.8$.
21.


The equation of the trend line is $y=-1.25 x+13$.
22.


The equation of the trend line is $y=1.5 x+0.5$.
23. The data would show a positive association. Answers may vary. Sample: Because the height of a plant increases as the number of days since germination increases, the data would show positive association.
24. Answers may vary. Sample: The trend line $y=-7 x+1,120$ models the data. The slope represents the change in the number of trees planted per acre as the planting density increases. The $y$-intercept represents the number of trees that would be planted per acre if there were no spacing.
25. Answers may vary. Sample: The trend line $y=0.2 x+0.5$ models the data. The slope of the trend line represents the increase in feet of maximum recommended viewing distance per increase in inch of screen size.
26. decrease, increase
27. B
28.


Part B Answers may vary. Sample: The trend line $y=-0.5 x+29$ models the data. The
slope represents the change in the number of kites sold for every dollar increase
in price.
Part C Yes; Answers may vary. Sample: People might prefer the design of a certain
kite, and so more of that kite might sell than less expensive kites. Yes, you can
make scatter plots of many variables, including number of a given design sold
vs. price per kite.

