4.4 Scatter Plots & Lines of Fit DAY TWO
Pg. 199
A: 8, 10, 12, 14, 16, 18, 28
B: 1, 2, 4 – 16 (e)
C: 4, 6, 8, 10, 12, 14, 16, 26

Answers without work to check. If you cannot find your mistake then please seek help EARLY! This assignment is worth 4 pts. 1) did you complete it 2) did you show all the work 3) did you correct in pen 4) did you get 75% of the problems correct?

4.4 pg. 199 answers with no work. Check the ones you were supposed to do for your assignment. Ask questions on any in class that you cannot figure out your mistake. Remember odd answers are always in the back of your textbook.

1. increase

2. a line drawn on a scatter plot that is close to most of the data points

3. 6

4. 14

5. 7

6. 8

7. **a.** $1100
   b. 12 GB
   c. increases

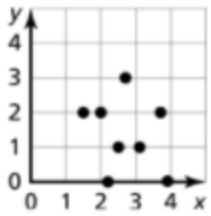
8. **a.** 0.600
b. 5
c. decreases

9. positive

10. no

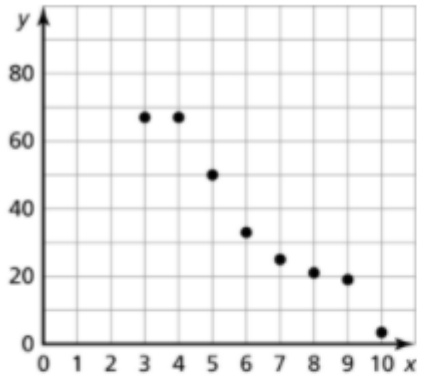
11. no

12. negative

13. 

no

14.



negative

15. **a.** *Sample answer:* $y = -0.3x + 35$

b. *Sample answer:* The slope of -0.3 means the birthrate is decreasing by about 3 births per 1000 people every 10 years. The y-intercept of 35 means in 1960 the birth rate was about 35 births per 1000 people.

16. **a.** *Sample answer:* $y = 20x$

b. *Sample answer:* The slope of 20 means the server's earnings increase by about \$20 per hour. The y-intercept of 0 means the server makes \$0 if he doesn't work.

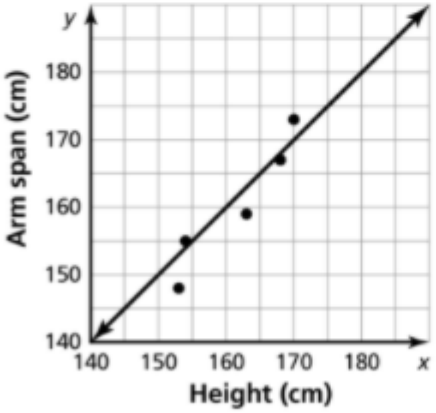
17. *Sample answer:*

Weight of car (pounds), *x*	2400	2500	2900	3000
Gas mileage (mpg), *y*	39	38	25	32

Weight of car (pounds), *x*	3400	3500	3700	5100
Gas mileage (mpg), *y*	30	24	21	16

18. no; Because both variables are decreasing, the data show a positive correlation.

19. **a.** *Sample answer:*



b. *Sample answer:* The slope of 1 means a person's arm span increases by about 1 centimeter for every 1 centimeter increase in height. The *y*-intercept of 0 has no meaning in this context because the height cannot be 0.

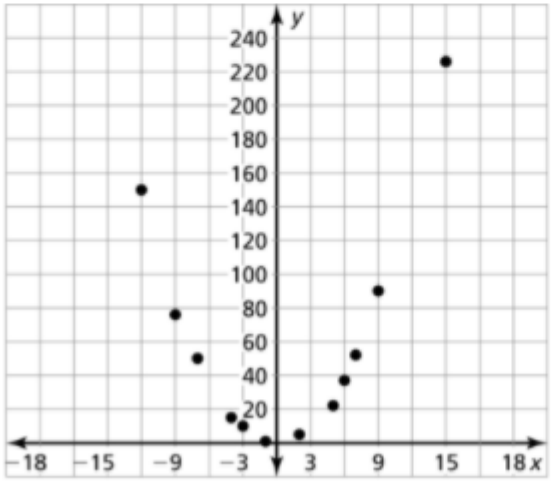
20. *Sample answer:* The number of students y in a school club x years after the club was founded.

21. *Sample answer:* When the data are from two sets such as age and time.

22. *Sample answer:* (2, 5), (9, 57), (12, 99), (15, 102)

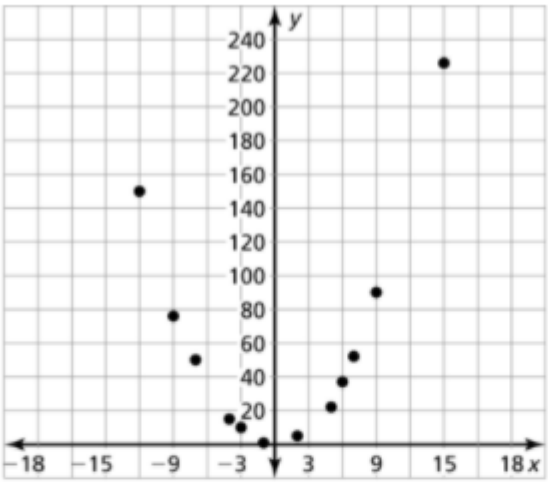
23. no; The data points do not have a linear trend.

24.



no correlation; no; The data points do not have a linear trend.

24.



no correlation; no; The data points do not have a linear trend.

25. −18, 0, 24

26. 30, 0, −40

27. −23, −8, 12

28. 23, 14, 2