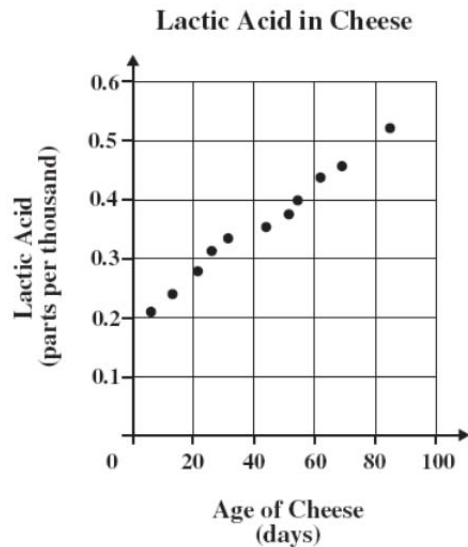


1. The scatterplot below shows the time cheese has been aging and the amount of lactic acid present in the cheese.

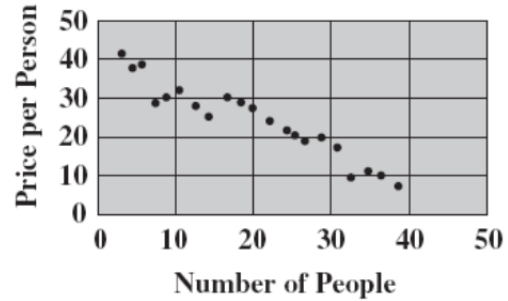


Which statement is MOST strongly supported by the scatterplot?

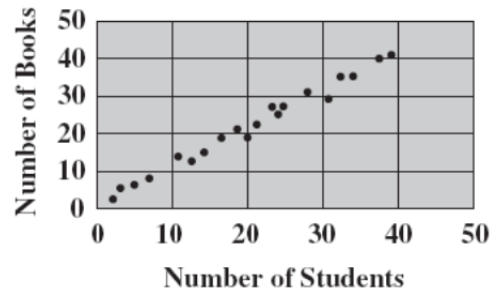
- A The longer cheese ages, the less lactic acid is present.
- B The amount of lactic acid present remains constant as cheese ages.
- C The longer cheese ages, the more lactic acid is present.
- D No relationship exists between the time cheese ages and the amount of lactic acid present.

2. Which scatterplot shows a positive correlation?

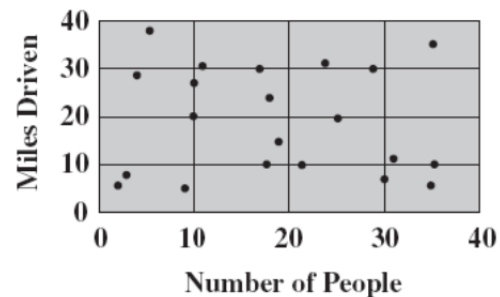
A



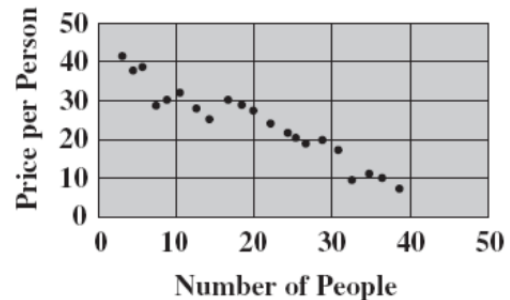
B



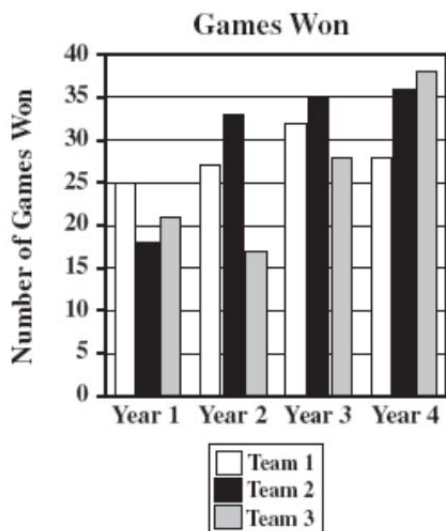
C



D



3. The number of games won over four years for three teams is shown on the graph below.

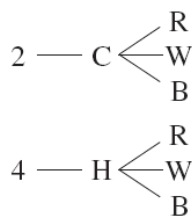


Which statement is true based on this information?

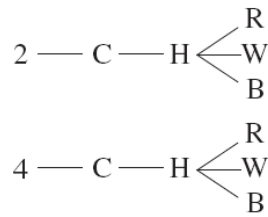
- A Team 3 always came in second.
- B Team 1 had the best average overall.
- C Team 1 always won more games than Team 3.
- D Team 2 won more games each year than in the previous year.

4. Carmen wants to buy a new car. Her choices are a 2-door or a 4-door, a convertible top or a hard top, a red, white, or black. Which of the following tree diagrams represents all the possible choices for the car.

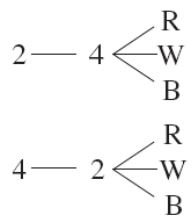
A



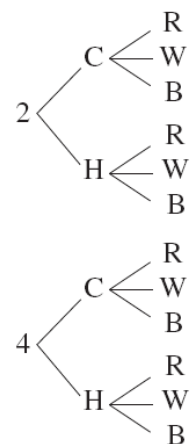
C



B



D



5. There are 15 red marbles, 18 blue marbles, and 12 green marbles in a bag. Jessica removed one green marble from the bag and did NOT put it back. She then randomly removed another marble. What is the probability that the second marble was green?

7. Ken is shopping at the market for a quart of ice cream. In the freezer section there are 7 quarts of Rocky Road, 4 quarts of Cookies n' Cream, 5 quarts of Mint Chip, and 6 quarts of Vanilla. Ken takes a quart of Rocky Road, but immediately puts it back. What is the probability that Ken randomly selects a quart of Cookies n' Cream?

9. If a coin is flipped three times, what is the probability of getting three heads.

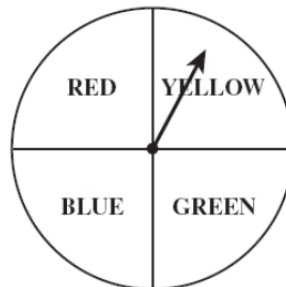
First Coin	Second Coin	Third Coin
H	H	H
H	H	T
H	T	H
H	T	T
T	H	H
T	H	T
T	T	H
T	T	T

11. What is the probability of getting a head when flipping a fair coin?

13. What is the probability of rolling an odd for a fair die?

6. There are 4 cans of Coca Cola, 6 cans of Sprite, and 9 cans of Sunkist soda in a bucket of ice. If James first takes a can of Sunkist, then what is the probability of Samantha randomly selecting a Sprite?

8. The spin board below is fair. Joshua and Melissa each take a chance flicking the spinner. If Joshua goes first and lands on red, what is the probability that Melissa will land on blue or green.

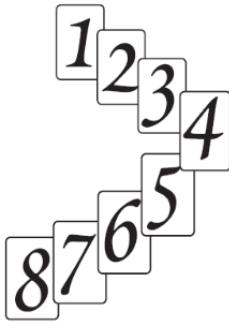


10. A die was rolled six times and each time the outcome was a 4. If the die is rolled again, what is the probability that the outcome is a 3?

12. What is the probability of getting a one or three when rolling a fair die?

14. What is the probability of rolling a 2, 3, 5, or 6 for a fair die.

15. These 8 cards are placed face down and shuffled.

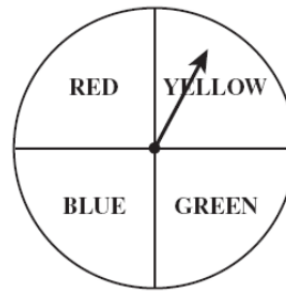


If Beatrice turns over only one card, what is the probability she will get a card with a number less than 7?

17. A bucket contains 5 bottles of apple juice, 7 bottles of orange juice, and 8 bottles of water. If Kira randomly selects a bottle, what is the probability that she will select a drink other than water or apple juice?

16. Fran has 22 CD's in a box: 8 country, 7 rock, 4 dance, and 3 classical. If she takes out one CD without looking, what is the probability that she will pick a country or dance CD?

18. The spinner shown below is fair. What is the probability that the spinner will NOT stop on yellow or green if you spin it one time? State the probability as a percentage.



19. What is the probability of not rolling a one or two for a fair die?

20. Ken's first three paychecks for his job were \$147, \$102, and \$123. What is the mean?

21. The data below shows the number of points scored by the Clippers in the past six games.

68, 97, 90, 105, 121, 108

What is the median price?

22. A list of the number of trips the space shuttle has taken to the moon each year for the past ten years is shown below. What is the mode of the list?

2, 4, 7, 5, 3, 1, 2, 3, 2, 1

### Answer Key:

- 1) C 2) B 3) D 4) D 5)  $\frac{1}{4}$  6)  $\frac{1}{3}$  7)  $\frac{2}{11}$  8)  $\frac{1}{2}$  9)  $\frac{1}{8}$  10)  $\frac{1}{6}$  11)  $\frac{1}{2}$  12)  $\frac{1}{3}$  13)  $\frac{1}{2}$
- 14)  $\frac{2}{3}$  15)  $\frac{3}{4}$  16)  $\frac{6}{11}$  17)  $\frac{7}{20}$  18) 50% 19)  $\frac{2}{3}$  20) \$124 21) 101 22) 2