## SATPREP Assignment:*Percentage*

- 1. By the end of the school year, Terry had passed 80% of his science tests. If Terry failed 4 science tests, how many science tests did Terry pass?
  - (A) 12
  - (B) 15
  - (C) 16
  - (D) 18
- 2. A soccer team has played 25 games and has won 60% of the games it has played. What is the minimum number of additional games the team must win in order to finish the season winning 80% of the games it has played?
  - (A) 28
  - (B) 25
  - (C) 21
  - (D) 18
- 3. In a movie theater, 480 of the 500 seats were occupied. What percent of the seats were NOT occupied?
  - (A) 0.4%
  - (B) 2%
  - (C) 4%
  - (D) 20%
- 4. In a certain mathematics class, the part of the class that are members of the math club is 50% of the rest of that class. The total number of math club members in this class is what percent of the entire class?
  - (A) 20%
  - (B) 25%
  - (C)  $33\frac{1}{3}\%$
  - (D) 50%
- 5. After 2 months on a diet, John's weight dropped from 168 pounds to 147 pounds. By what percent did John's weight drop?
  - (A)  $12\frac{1}{2}\%$
  - (B)  $14\frac{2}{7}\%$
  - (C) 21%
  - (D) 25%
- 6. If 1 cup of milk is added to a 3-cup mixture that is  $\frac{2}{5}$  flour and  $\frac{3}{5}$  milk, what percent of the 4-cup mixture is milk?

- (A) 80%
- (B) 75%
- (C) 70%
- (D) 65%

7. If the result of increasing *a* by 300% of *a* is *b*, then *a* is what percent of *b*?

- (A) 20%
- (B) 25%
- (C)  $33\frac{1}{3}\%$
- (D) 40%

8. After a 20% increase, the new price of a radio is \$78.00. What was the original price of the radio?

- (A) \$15.60
- (B) \$60.00
- (C) \$62.40
- (D) \$65.00

9. After a discount of 15%, the price of a shirt is \$51. What was the original price of the shirt?

- (A) \$44.35
- (B) \$58.65
- (C) \$60.00
- (D) \$64.00
- 10. Three students use a computer for a total of 3 hours. If the first student uses the computer 28% of the total time, and the second student uses the computer 52% of the total time, how many minutes does the third student use the computer?
  - (A) 24
  - (B) 30
  - (C) 36
  - (D) 42
- 11. In an opinion poll of 50 men and 40 women, 70% of the men and 25% of the women said that they preferred fiction to nonfiction books. What percent of the number of people polled preferred to read fiction?
  - (A) 40%
  - (B) 45%
  - (C) 50%
  - (D) 60%
- 12. In a factory that manufactures light bulbs, 0.04% of all light bulbs manufactured are defective. On the average, there will be three defective light bulbs out of how many manufactured?
  - (A) 2,500
  - (B) 5,000
  - (C) 7,500
  - (D) 10,000

- 13. A used-car lot has 4-door sedans, 2-door sedans, sports cars, vans, and jeeps. Of these vehicles, 40% are 4-door sedans, 25% are 2-door sedans, 20% are sports cars, 10% are vans, and 20 of the vehicles are jeeps. If this car lot has no other vehicles, how many vehicles are on the used-car lot?
  - (A) 300
  - (B) 400
  - (C) 480
  - (D) 600
- 14. Jack's weight first increased by 20% and then his new weight decreased by 25%. His final weight is what percent of his beginning weight?
  - (A) 95%
  - (B) 92.5%
  - (C) 90%
  - (D) 88.5%
- 15. The price of a stock falls 25%. By what percent of the new price must the stock price rise in order to reach its original value?
  - (A) 25%
  - (B) 30%
  - (C)  $33\frac{1}{3}\%$
  - (D) 40%

VOTING POLL	
Candidate A	30%
Candidate B	50%
Undecided	20%

- 16. The table above summarizes the results of an election poll in which 4,000 voters participated. In the actual election, all 4,000 of these people voted, and those people who chose a candidate in the poll voted for that candidate. People who were undecided voted for candidate A in the same proportion as the people who cast votes for candidates in the poll. Of the people polled, how many voted for candidate A in the actual election?
  - (A) 1,420
  - (B) 1,500
  - (C) 1,640
  - (D) 1,680
- 17. A car starts a trip with 20 gallons of gas in its tank. The car traveled at an average speed of 65 miles per hour for 3 hours and consumed gas at a rate of 30 miles per gallon. What percent of the gas in the tank was used for the 3-hour trip?
  - (A) 32.5
  - (B) 33.0
  - (C) 33.5
  - (D) 34.0

- 1. A store offers a 4% discount if a consumer pays cash rather than paying by credit card. If the cash price of an item is \$84.00, what is the credit-card purchase price of the same item?
- 2. During course registration, 28 students enroll in a certain college class. After three boys are dropped from the class, 44% of the class consists of boys. What percent of the original class did girls comprise?
- 3. A high school tennis team is scheduled to play 28 matches. If the team wins 60% of the first 15 matches, how many additional matches must the team win in order to finish the season winning 75% of its scheduled matches?
- 4. In a club of 35 boys and 28 girls, 80% of the boys and 25% of the girls have been members for more than 2 years. If *n* percent of the club have been members for more than 2 years, what is the value of *n*?

















