SAT Math Practice

Topic: Percentages and Proportional Relationships

Instructions

Solve the following problems related to percentages and proportional relationships. Show all work clearly. For multiple-choice questions, circle the correct answer. For grid-in questions, fill in the grid with your answer.

Practice Problems

1. A store is offering a 20% discount on an item priced at \$50. What is the sale price of the item?
   (a) \$10
   (b) \$30
   (c) \$40
   (d) \$45

2. A student scored 75 out of 100 on a test. What percentage did the student score?
   (a) 70%
   (b) 75%
   (c) 80%
   (d) 85%

3. If the price of a book increases from \$12 to \$15, what is the percentage increase in price?
   (a) 15%
   (b) 20%
   (c) 25%
   (d) 30%

4. A class has 30 students, and 40% of them are absent. How many students are absent?
   (a) 10
   (b) 12
   (c) 14
   (d) 15

5. A store sells shirts at a rate of 3 shirts for \$18. How much would 5 shirts cost at the same rate?
   (a) \$30
   (b) \$28
   (c) \$25
   (d) \$23

6. A student received 18 out of 20 questions correct on a quiz. What percentage of the questions did the student answer correctly?
   (a) 80%
   (b) 85%
   (c) 90%
   (d) 95%

7. The price of a concert ticket is \$40, and there is a 25% tax. What is the total price of the ticket including tax?
   (a) \$45
   (b) \$50
   (c) \$55
   (d) \$60

8. A company pays employees 15% of their sales. If an employee makes $2,000 in sales, how much will they earn in commission?
   (a) $150
   (b) $200
   (c) $250
   (d) $300

9. A product is on sale for $120, which is 30% off the original price. What is the original price of the product?
   (a) $130
   (b) $140
   (c) $150
   (d) $160

10. A company has 80 employees, and 25% of them are managers. How many managers are there in the company?
    (a) 10
    (b) 15
    (c) 20
    (d) 25

11. A population of 500 people grows by 10% annually. What is the population after 1 year?
    (a) 505
    (b) 510
    (c) 515
    (d) 520

12. A store offers a 15% discount on all items. If an item is originally priced at $80, what is the sale price of the item?
    (a) $60
    (b) $65
    (c) $70
    (d) $75

13. A person saved 20% of their salary, which is \$1,500. How much money did they save?

    (a) \$200
    (b) \$250
    (c) \$300
    (d) \$350

14. A recipe calls for 2 cups of sugar for every 5 cups of flour. If a baker uses 15 cups of flour, how many cups of sugar are needed?

    (a) 4
    (b) 5
    (c) 6
    (d) 7

15. The price of a stock increases from \$50 to \$75. What is the percentage increase in the price of the stock?

    (a) 40%
    (b) 50%
    (c) 60%
    (d) 70%

16. A store sells a product for \$250, which is 20% more than the cost price. What is the cost price of the product?

    (a) \$200
    (b) \$210
    (c) \$220
    (d) \$230

17. A machine produces 150 units per hour. How many units will it produce in 10 hours?

    (a) 1,400
    (b) 1,500
    (c) 1,600
    (d) 1,700

Answer Key

1. (c) \$40
2. (b) 75%
3. (b) 25%
4. (b) 12
5. (a) \$30
6. (c) 90%
7. (b) \$50
8. (b) \$200
9. (c) \$150
10. (b) 20
11. (c) 550
12. (a) \$68
13. (a) \$300
14. (c) 6
15. (a) 50%
16. (a) \$200
17. (b) 1,500