

**NASSAU COMMUNITY COLLEGE
PLACEMENT TESTING PRACTICE ARITHMETIC**

Arithmetic Review

1. Estimate the product by rounding to the nearest ten:

$$28 \times 51 \times 76$$

2. A car travels 600 miles in 5 hours. What is the average speed of the car?
3. Solve for x by writing a related sentence:

$$24 + x = 80$$

4. Brad rents a car that costs him \$35 for the day for up to 100 miles. If he drives over 100 miles, the cost is 10 cents per mile. He takes a 210 mile trip. How much does it cost him?
5. Perform the indicated operation and simplify your answer:

$$42 \div \frac{21}{30}$$

6. A piece of cardboard is $\frac{5}{12}$ of a foot wide. Strips $\frac{1}{24}$ foot wide must be cut from this piece of cardboard. How many strips can be cut?
7. Change $\frac{3}{8}$ to a decimal. If the decimal is repeating write it in proper form.
8. How much does 1.67 lbs. of bologna cost at \$1.49 per pound? (Round to the nearest cent)
9. Solve the following for the indicated variable:

$$\frac{6}{y} = \frac{9}{12}$$

10. The owner of a local golf course finds that 2 out of the first 15 golfers were left-handed. Approximately how many left-handed golfers did the owner see today if there were a total of 105 golfers who played?
11. 56 is what percent of 160?

12. Gillian put \$100 into a bank account that compounds at 4% annually. How much money does she have in two years?
13. A car that costs \$12,500 last year costs \$18,000 this year. What is the percent increase in price?
14. While shopping at the grocery store, Marge noticed that a 24 pack carton of juice had 15 cans missing. What fraction of the 24 pack carton of juice was missing? Reduce fraction to lowest terms
15. Ellen is knitting a scarf with one $1\frac{2}{3}$ inch blue stripe, one $2\frac{1}{2}$ inch green stripe, and one 6 inch white stripe. How wide is the scarf?
16. At SuperStop, gasoline costs \$3.29 per gallon when you pay with a credit card, \$0.08 per gallon less when you pay with cash. How much do you save by filling a 14-gallon tank if you are paying cash?
17. Simplify by using the order of operations. Round your answer to the nearest hundredth, if necessary.

$$59 - 4.8 \cdot (0.66 + 8) - (1.7)^2$$

18. Write the ratio as a fraction in lowest terms.

$$7 \text{ to } 5\frac{1}{2}$$

19. What is 50% of 1580 employees?

20. Evaluate: $-|-13|$

Arithmetic Answers

1. 120,000
2. 120 mph
3. 56
4. \$46
5. 60
6. 10 strips
7. 0.375
8. \$2.49
9. 8
10. 14
11. 35
12. \$108.16
13. 44%
14. $\frac{5}{8}$ carton
15. $10\frac{1}{6}$ inches
16. \$1.12
17. 14.542
18. $\frac{14}{11}$
19. 790 employees
20. - 13