# Arithmetic

There are 17 questions administered on the Arithmetic test, divided into the following content areas:

- Operations with whole numbers and fractions. Topics include addition, subtraction, multiplication, division, recognizing equivalent fractions and mixed numbers, and estimating.

- Operations with decimals and percents. Topics include addition, subtraction, multiplication, and division with decimals; percent problems; recognition of decimals; percent equivalencies; and estimating.

- Applications and problem solving. Topics include rate, percent and measurement problems; simple geometry problems; and distribution of a quantity into its fractional parts.

# Arithmetic Sample Questions

*For each of the questions below, choose the best answer from the four choices given. You may use the paper you received as scratch paper.*

1. $2.75 + 0.003 + 0.158 =$

    A. 0.436
    B. 2.911
    C. 2.938
    D. 4.36

2. $7.86 \times 4.6 =$

    A. 36.156
    B. 36.216
    C. 351.56
    D. 361.56

3. $\dfrac{7}{20} =$

    A. 0.035
    B. 0.35
    C. 0.858
    D. 3.5

4. Which of the following is the least?

    A. 0.105
    B. 0.501
    C. 0.015
    D. 0.15

5. All of the following are ways to write 25 percent of $N$ EXCEPT

    A. $(0.25)N$

    B. $\dfrac{25}{100} N$

    C. $\dfrac{1}{4} N$

    D. $25N$

6. Which of the following is closest to $27.8 \times 9.6$?

    A. 280
    B. 300
    C. 2,800
    D. 3,000

7. A soccer team played 160 games and won 65 percent of them. How many games did the team win?

    A. 94
    B. 104
    C. 114
    D. 124

8. There are 3 people who work full-time and are to work together on a project, but their total time on the project is to be equivalent to that of only one person working full-time. If one of the people is budgeted for $\frac{1}{2}$ of his time to the project and a second person for $\frac{1}{3}$ of her time, what part of the third worker's time should be budgeted to this project?

    A. $\frac{1}{8}$

    B. $\frac{1}{6}$

    C. $\frac{1}{3}$

    D. $\frac{3}{5}$

9. 32 is 40% of what number?

    A. 12.8
    B. 128
    C. 80
    D. 800

10. $3\frac{1}{3} - 2\frac{2}{5} =$

    A. $\frac{1}{15}$

    B. $\frac{14}{15}$

    C. $1\frac{1}{15}$

    D. $1\frac{1}{2}$

11. $2\frac{1}{2} + 4\frac{2}{3} =$

    A. $6\frac{1}{6}$

    B. $6\frac{5}{6}$

    C. $7\frac{1}{6}$

    D. $7\frac{5}{6}$

12. What is $\frac{1,345}{99}$ rounded to the nearest integer?

    A. 12
    B. 13
    C. 14
    D. 15

13. Three of four numbers have a sum of 22. If the average of the four numbers is 8, what is the fourth number?

    A. 4
    B. 6
    C. 8
    D. 10

14. $46.2 \times 10^{-2} =$

    A. 0.0462
    B. 0.462
    C. 4.62
    D. 462

15. If $\frac{3}{2} \div \frac{1}{4} = n$, then $n$ is between

    A. 1 and 3
    B. 3 and 5
    C. 5 and 7
    D. 7 and 9

16. What is 12% of 120?

    A. 10
    B. 14.4
    C. 18.4
    D. 28.8

17. A box in a college bookstore contains books, and each book in the box is a history book, an English book or a science book. If $\frac{1}{3}$ of these books are history books and $\frac{1}{6}$ are English books, what fraction of the books are science books?

    A. $\frac{1}{3}$

    B. $\frac{1}{2}$

    C. $\frac{2}{3}$

    D. $\frac{3}{4}$

18. The measures of two angles of a triangle are 35° and 45°. What is the measure of the third angle of the triangle?

    A. 95°
    B. 100°
    C. 105°
    D. 110°

19. Erica bought $3\frac{1}{2}$ yards of fabric. If she uses $\frac{2}{3}$ of the fabric to make a curtain, how much will she have left?

    A. $\frac{1}{6}$ yard

    B. $\frac{1}{3}$ yard

    C. $1\frac{1}{6}$ yards

    D. $2\frac{1}{3}$ yards

20. Jen wants to tile the floor of her kitchen. The floor is rectangular and measures 12 feet by 8 feet. If it costs $2.50 per square foot for the materials, what is the total cost of the materials for tiling the kitchen floor?

    A. $160
    B. $200
    C. $220
    D. $240