ARITHMETIC

Suggested time – 40 minutes
35 Questions

Directions: In this section solve each problem. Then decide which is the best of the choices given.

1. What is 7.2589 rounded to the nearest hundredth?

(A) 7.26 (B) 7.3 (C) 7.2 (D) 7.25

2. $\frac{52}{78} =$

(A) $\frac{3}{4}$ (B) $\frac{8}{9}$ (C) $\frac{2}{3}$ (D) $\frac{5}{6}$

3. $1.37 + 9.2 + 5.001 =$

(A) 5.23 (B) 6.13 (C) 52.3 (D) 15.571

4. 2.53×3.1 is between

(A) 4 and 6 (B) 6 and 8 (C) 60 and 80 (D) 600 and 800

5. $\frac{3}{4}$ of 48 is

(A) 16 (B) 36 (C) 38 (D) 64

6. $35.2 - 3.31 =$

(A) 31.89 (B) 32.01 (C) 31.98 (D) 32.13

7. Beth makes fruit punch by adding 3 cups of fruit juice to every 5 liters of soda. If she uses 15 liters of soda, how many cups of juice should she use?

(A) 9 (B) 12 (C) 13 (D) 25

8. $\frac{5.7}{0.028}$ is closest to

(A) 2 (B) 20 (C) 200 (D) 2000

9. $\frac{3}{8} + \frac{1}{4} =$

(A) $\frac{1}{2}$ (B) $\frac{5}{8}$ (C) $\frac{4}{8}$ (D) $\frac{1}{3}$

10. If the average of 5 numbers is 50, what is their sum?

(A) 10 (B) 25 (C) 55 (D) 250

11. $\frac{5}{11} \div \frac{3}{7} =$

(A) $\frac{1}{11}$ (B) $\frac{35}{33}$ (C) $\frac{1}{2}$ (D) $\frac{33}{35}$

12. $1\frac{2}{3} \times 2\frac{3}{8} =$

(A) $3\frac{23}{24}$ (B) $4\frac{1}{24}$ (C) $2\frac{1}{4}$ (D) $\frac{40}{57}$

13. $\frac{7}{20} =$

(A) 0.305 (B) 0.35 (C) 2.86 (D) 13

14. $\frac{3}{4} - \frac{1}{6} =$

(A) 1 (B) $\frac{2}{24}$ (C) $\frac{2}{3}$ (D) $\frac{7}{12}$

15. If 10 percent of a number is 40, then 25 percent of that number is

(A) 4 (B) 10 (C) 16 (D) 100

16. A clock that gains 20 seconds every hour will gain how many minutes in a day?

(A) 4 (B) 8 (C) 16 (D) 32

17. $3 \div \frac{5}{6} =$

(A) $\frac{18}{5}$ (B) $\frac{5}{2}$ (C) $\frac{2}{5}$ (D) $\frac{5}{18}$

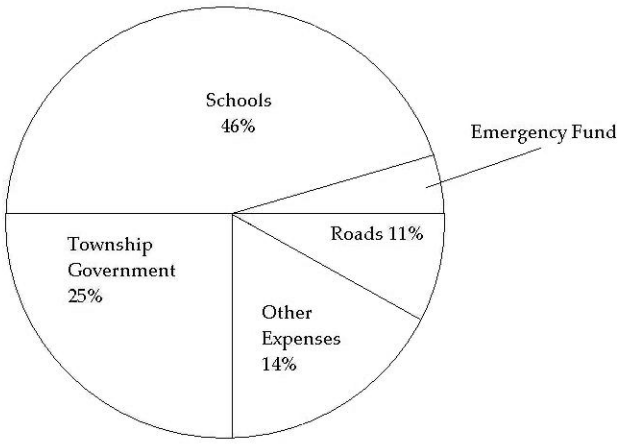

FIGURE 1. Tax Allocation in Frazier Township

18. According to the graph above, if the township collected a total of $3,600,000 in taxes, what amount was set aside for the emergency fund?

(A) $900,000 (B) $144,000 (C) $90,000 (D) $14,400

19. $58,602 \div 5 =$

(A) $1172\frac{2}{5}$ (B) $1172\frac{3}{5}$ (C) $11720\frac{2}{5}$ (D) $11720\frac{4}{5}$

20. If eight furlongs measures 320 rods, how many furlongs are in a measure of 600 rods?

(A) 16 (B) 20 (C) 15 (D) 40

A theater was sold out for 85 percent of its performances last season. Once the theater was sold out for 15 performances in a row.

21. From the information above, which of the following can be determined?

(A) The total number of performances last season that were sold out.
(B) The number of performances last season that were not sold out.
(C) The percent of the performances last season that were not sold out.
(D) The percent of the performances sold out in a row.

22. Three people who work full time are to work together on a project, but their total time in the project is to be equivalent to that of only one person working full time. If one of the people is budgeted for $\frac{1}{3}$ of his time to the project and a second person $\frac{1}{4}$ of her time, what part of the third worker's time should be budgeted to this project?

(A) $\frac{1}{12}$ (B) $\frac{5}{12}$ (C) $\frac{4}{7}$ (D) $\frac{3}{4}$

23. 12.5 percent of 402 is closest to

(A) 35 (B) 40 (C) 50 (D) 480

24. 5.905×100.04 is closest to

(A) 500 (B) 600 (C) $5,000$ (D) $6,000$

25. In year X the population of a certain city was reported to be 503,200, which represented 82 percent of the state's population. According to these figures, what was the approximate population of the state in year X?

(A) $410,000$ (B) $510,000$ (C) $610,000$ (D) $790,000$

26. Which of the following is greater than 0.30 and less than 0.50?

(A) $\frac{1}{8}$ (B) $\frac{2}{5}$ (C) $\frac{3}{5}$ (D) $\frac{4}{5}$

27. How many fifths are there in 2.8?

(A) 140 (B) 14 (C) 5.6 (D) 0.56

28. If $\frac{N}{10}$ equals 0.41, then N is approximately

(A) 41 (B) 4 (C) 5 (D) 0.6

29. If 1 *pik* = 10 *jums* and 1 *dim* = 25 *jums*, what is the ratio of the value of 5 *piks* to 4 *dims*?

(A) 1 : 2 (B) 2 : 5 (C) 5 : 2 (D) 5 : 4

30. On two tests, a student scored 85 and 92, respectively. What score must the student achieve on a third test in order to have an average score of 90 for the 3 tests?

(A) 89 (B) 90 (C) 93 (D) 95

31. Which of the following is closest to $\sqrt{4000}$?

(A) 20 (B) 60 (C) 400 (D) 2000

32. A rectangular recreation area 20 meters long and 15 meters wide is to be marked off by putting a rope around it. The length of the shortest rope that can be used is about how many meters?

(A) 35 (B) 70 (C) 105 (D) 300

33. $\dfrac{7.14 \times 0.009}{0.11}$ is closest to which of the following?

(A) 0.0714 (B) 0.714 (C) 7.14 (D) 71.4

34. Which of the following shows a way to change $\frac{2}{5}$ to an equivalent fraction?

(A) $\dfrac{2}{5} + \dfrac{5}{2}$ (B) $\dfrac{2}{5} \times \dfrac{5}{2}$ (C) $\dfrac{2}{5} + \dfrac{2}{2}$ (D) $\dfrac{2}{5} \times \dfrac{2}{2}$

35. $8\dfrac{1}{16} - 1\dfrac{7}{8}$ is closest to

(A) 6 (B) $6\dfrac{1}{2}$ (C) 7 (D) $7\dfrac{1}{2}$