SECTION 4

Time - 30 Minutes
25 Questions

Following each problem in this section, there are five suggested answers. Work each problem in your head or in the blank space provided at the right of the page. Then look at the five suggested answers and decide which one is best.

Note: Figures that accompany problems in this section are drawn as accurately as possible EXCEPT when it is stated in a specific problem that its figure is not drawn to scale.

Sample Problem:

$$\begin{array}{r} 5{,}413 \\ -\ 4{,}827 \\ \hline \end{array}$$

(A) 586
(B) 596
(C) 696
(D) 1,586
(E) 1,686

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USE THIS SPACE FOR FIGURING.

1. When 7,903 is divided by 406, the result is closest to which of the following?

   (A) 10
   (B) 15
   (C) 20
   (D) 25
   (E) 30

2. If $25 \times N = 25$, then $25 + N =$

   (A) 0
   (B) $\frac{1}{25}$
   (C) 1
   (D) 25
   (E) 26

USE THIS SPACE FOR FIGURING.

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3. $100 - 5\frac{3}{20} =$

(A) $94\frac{17}{20}$

(B) $95\frac{3}{20}$

(C) $95\frac{17}{20}$

(D) $96\frac{3}{4}$

(E) $97\frac{3}{4}$

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4. A strip $4\frac{1}{2}$ feet long can be cut into how many strips each 6 inches long?

(A) 5
(B) 6
(C) 8
(D) 9
(E) 27

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5. $0.025 \times 50.00 =$

(A) 0.0125
(B) 0.125
(C) 1.25
(D) 12.5
(E) 125

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6. If $N > 6$, then $2N + 5$ could be

(A) 14
(B) 15
(C) 16
(D) 17
(E) 18

USE THIS SPACE FOR FIGURING. **4**

7. $2\frac{3}{8} + 1\frac{7}{8} + 3\frac{3}{8} =$

(A) 8.125
(B) 7.625
(C) 7.25
(D) 7.125
(E) 6.875

8. The average weight of 3 boys is 120 pounds and the average weight of 2 girls is 105 pounds. What is the average weight, in pounds, of all 5 children?

(A) 92.5
(B) 110
(C) 112.5
(D) 114
(E) 116

9. All of the following products are equal EXCEPT

(A) $2 \times \frac{3}{4}$
(B) $4 \times \frac{3}{8}$
(C) $8 \times \frac{3}{16}$
(D) $16 \times \frac{3}{32}$
(E) $20 \times \frac{30}{40}$

10. 12 is 8 per cent of

(A) 96
(B) 104
(C) 132
(D) 150
(E) 164

USE THIS SPACE FOR FIGURING.

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6 6 6 6 6

↑ ↑

P *Q*

11. The "6" in place *P* in the numeral above has a value how many times the value of the "6" in place *Q* ?

(A) 10,000
(B) 1,000
(C) 100
(D) 10
(E) 1

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12. Ms. Vizzari purchased 972 square yards of carpet for \$17, 496. What was her cost per square foot?

(A) \$18.00
(B) \$9.75
(C) \$6.00
(D) \$2.00
(E) \$1.25

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13. Taxi fare is \$1.00 for the first $\frac{1}{2}$ mile and \$0.35 for each additional $\frac{1}{2}$ mile. How many miles can a passenger ride for \$3.10 ?

(A) $3\frac{1}{2}$
(B) 4
(C) $6\frac{1}{2}$
(D) 7
(E) $7\frac{1}{2}$

USE THIS SPACE FOR FIGURING.

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14. A bus driver took between $2\frac{1}{2}$ and 3 hours to make a 165-mile trip. The average speed, in miles per hour, must have been between

(A) 45 and 48
(B) 48 and 50
(C) 50 and 55
(D) 55 and 66
(E) 66 and 110

15. The average time for each leg of a five-leg road race took Bob three hours and thirty-six minutes. How long did it take Bob to complete the race?

(A) 12 hours and 20 minutes
(B) 13 hours
(C) 16 hours and 16 minutes
(D) 18 hours
(E) 19 hours and 12 minutes

16. In Figure 1, if three lines meet as shown, what is the value of $2x + y$?

(A) 70
(B) 80
(C) 140
(D) 160
(E) It cannot be determined from the information given.

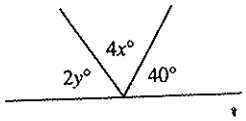

Figure 1

17. $4\overline{)824}$ =

(A) $\frac{800}{4} \times \frac{20}{4} \times \frac{4}{4}$
(B) $\frac{800}{4} + \frac{20}{4} + \frac{4}{4}$
(C) $\frac{80}{4} + \frac{24}{4}$
(D) $\frac{800}{4} + 24$
(E) $\frac{8}{4} + \frac{2}{4} + \frac{4}{4}$

18. There are 25 workers in Linda's office. When she collected \$0.40 from each person to pay for a cake, she found that she only had $\frac{2}{3}$ of the money she needed to pay for the cake. How much more money must she collect from each person to pay for the cake?

USE THIS SPACE FOR FIGURING.

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(A) \$0.15
(B) \$0.20
(C) \$0.30
(D) \$0.40
(E) \$0.66

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19. Which of the following gives the number of cents in q quarters, d dimes, and 4 nickels?

(A) $\frac{q}{25} + \frac{d}{10} + 20$
(B) $\frac{25}{q} + \frac{10}{d} + 20$
(C) $5q + 2d + 4$
(D) $25q + 10d + 20$
(E) $25q + 5d + 40$

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20. An irregularly shaped field has a perimeter of 864 feet. If each fence segment is 9 yards long, how many segments are required to enclose the field?

(A) 28
(B) 32
(C) 44
(D) 54
(E) 96

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21. Mike has \$12,500 in savings, on which he receives 7 percent interest per year. How much interest did Mike earn last year?

(A) 625 dollars
(B) 675 dollars
(C) 725 dollars
(D) 875 dollars
(E) 950 dollars

GO ON TO THE NEXT PAGE.

22. If $p + q$ is divisible by 3, which of the following is also divisible by 3 ?

USE THIS SPACE FOR FIGURING.

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(A) $(p \times q) + 3$
(B) $p + (3 \times q)$
(C) $(3 \times p) + q$
(D) $(2 \times p) + (2 \times q)$
(E) $\frac{p+q}{3}$

23. In a survey, each of 350 farmers were found to own either a tractor, a plow, or both. If 186 farmers own a tractor, and 233 own a plow, how many farmers own both a tractor and a plow?

(A) 42
(B) 69
(C) 132
(D) 202
(E) 419

24. Six people participate in a van pool. Each pays $18 per week. If three more people joined the van pool and shared expenses equally, how much would each person pay?

(A) $10
(B) $11
(C) $12
(D) $13
(E) $15

25. If $n > 3$, which of the following is greatest?

(A) $2n + 3$

(B) $n + 3$

(C) $n - 3$

(D) $\frac{n}{n+3}$

(E) $\frac{n+3}{n}$

USE THIS SPACE FOR FIGURING.

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STOP

IF YOU FINISH BEFORE TIME IS CALLED,
YOU MAY CHECK YOUR WORK ON THIS SECTION ONLY.
DO NOT TURN TO ANY OTHER SECTION IN THE TEST.