Fractions, Percent, Ratio. Form A

1. What is the least common denominator for the fractions $\frac{3}{2}, \frac{3}{8}, \frac{5}{6}$?

(A) 96
(B) 16
(C) 48
(D) 8
(E) 24

2. What is the least common denominator for $\frac{3}{5}, \frac{3}{10}, \frac{5}{3}, 5$?

(A) 30
(B) 60
(C) 5
(D) 1
(E) 3

3. In what order should $\frac{1}{2}, \frac{2}{3}, \frac{1}{4}, \frac{20}{3}, \frac{5}{6}$ be listed by increasing size?

(A) $\frac{1}{2}, \frac{2}{3}, \frac{1}{4}, \frac{20}{3}, \frac{5}{6}$

(B) $\frac{1}{4}, \frac{5}{6}, \frac{2}{3}, \frac{1}{2}, \frac{20}{3}$

(C) $\frac{20}{3}, \frac{1}{2}, \frac{2}{3}, \frac{5}{6}, \frac{1}{4}$

(D) $\frac{1}{4}, \frac{1}{2}, \frac{2}{3}, \frac{5}{6}, \frac{20}{3}$

(E) $\frac{1}{4}, \frac{1}{2}, \frac{2}{3}, \frac{20}{3}, \frac{5}{6}$

4. The fraction $\frac{2}{5}$ is equal to?

(A) 0.4%
(B) 40%
(C) 25%
(D) 10%

(E) 0.25%

5. What is 28% equal to?

(A) $\dfrac{28}{50}$

(B) $\dfrac{7}{50}$

(C) $\dfrac{7}{25}$

(D) 28

(E) $\dfrac{7}{28}$

6. Which of the following is a rational number?

(A) $\dfrac{\pi}{3}$

(B) $\dfrac{\sqrt{5}}{2}$

(C) $\dfrac{\sqrt{49}}{\pi}$

(D) $\sqrt{\dfrac{36}{25}}$

(E) $\sqrt{7}$

7. What rational number is between $\dfrac{1}{2}$ and 1?

(A) $\dfrac{7}{8}$

(B) $\dfrac{1}{4}$

(C) $\dfrac{1}{11}$

(D) $\dfrac{4}{9}$

(E) $\frac{3}{8}$

8. Which repeating decimal below is equivalent to the fraction $\frac{2}{7}$?

(A) $0.\overline{286}$

(B) $0.\overline{285714}$

(C $0.\overline{2857}$

(D $0.2857\overline{14}$

(E) $0.\overline{29}$

9. What is the 322nd digit after the decimal point in the repeating decimal $0.\overline{1357}$?

(A) 1

(B) 3

(C 5

(D 7

(E) 0

10. The decimal 3.75 is equivalent to?

(A) $3\frac{3}{4}$

(B) $3\frac{1}{4}$

(C) $3\frac{7}{10}$

(D) $\frac{14.99}{4}$

(E) $3\frac{1}{8}$

11. A pair of pants is priced at $70. If you get a discount of 25% and then use a $5 coupon, what is the final cost of the pants?

(A) $50

(B) $17.5

(C) $12.5
(D) $52.5
(E) $47.5

12. A soccer jersey is priced at $89. If you get a 30% sale discount and then a 10% loyal customer discount, what is the final cost of the jersey?

(A) $53.4
(B) $62.3
(C) $56.07
(D) $52.5
(E) $35.6

13. A car is priced at $35,000. If the dealer offers a 5% dealer discount, and then a $2,000 college student discount. What are the total savings?

(A) $5,000
(B) $3,500
(C) $4,000
(D) $3,750
(E) $2,500

14. Kenzi bought a pair of pants at a discounted price of $30. The original price of the pants was $40. What percent discount did Kenzi get?

(A) 15%
(B) 30%
(C) 25%
(D) 75%
(E) 33%

15. A car costs the dealer $33,000. If he wants to sell it at a 7% markup, what is the sale price of the car?

(A) $35,999
(B) $35,500
(C) $35,000
(D) $35,310
(E) $35,750

16. Manga bought $15 worth of fruit and $30 worth of clothes from a Super Market. If fruits are taxed at 3%, and clothes are taxed at 11%, what did Manga pay in total?

(A) $53.4

(B) $51.3

(C) $48.75

(D) $48.90

(E) $49.99

17. Jana orders a $29 entre from a restaurant. If the tax is 11%, and Jana pays a 20% tip on the total (after tax), how much did Jana pay rounded to the nearest penny?

(A) $38.63

(B) $38.28

(C) $40

(D) $42.90

(E) $37.25

18. On a certain state map, one inch represents 15 miles. How many miles do 3.75 inches represent?

(A) 4

(B) 18.75

(C) 20

(D) 62.75

(E) 56.25

19. The cost of gold is proportional to its weight. A two ounce of gold is $5,000. What is the cost of 3.5 ounces gold bar?

(A) $8,500

(B) $8,000

(C) $9,000

(D) $8,750

(E) $9,500

20. A bag contains 3 yellow marbles, 5 red marbles, and 9 blue marbles. What is the ratio of yellow marbles to blue marbles?

(A) 3:1

(B) 1:3

(C) 3:14

(D) 5:3

(E) 9:3

21.Sarah made $250 when she worked for 20 hours. How much will she make if she works 31 hours?

(A) $350.5
(B) $387.5
(C) $400
(D) $500.05
(E) $300

Answers

1. E   11. E   21. B
2. A   12. C
3. D   13. D
4. B   14. C
5. C   15. D
6. D   16. C
7. A   17. A
8. B   18. E
9. B   19. D
10. A   20. B