Sample Questions :

These questions could appear on either test. Answers follow the last question.

1. Which of the following numbers is smallest

A. 2.53   B. $2\frac{2}{5}$ C. $\frac{23}{10}$ D. 2.305   E. $\frac{7}{3}$

2. The first-year class at Eastern State University has 2000 students. Eighty percent of these students are in-state students and 40% of the in-state students are males. How many in-state males are there in the first-year class?

A. 1600   B. 400   C 800   D. 640   E. 320

3. A string of decorative lights has 6 red lights for every 4 green lights. If the string contains 48 green lights, how many red lights does it contain?

A. 12   B. 32   C. 72   D. 48   E. 54

4. Water is being added to a vat at such a rate that, D, the depth, in inches, of the water in the vat at time t, measured in minutes, is given by the formula $D = \frac{2}{5}T + 4$. How deep is the water in the vat at time T = 8 minutes?

A. $7\frac{1}{5}$ B. $5\frac{4}{5}$ C. 4   D. $12\frac{2}{5}$ E. $2\frac{4}{5}$

5. A bowl contains 8 apples, 10 oranges, and 12 pears. One piece of fruit is selected at random from this bowl. What is the probability that the piece of fruit selected is an orange?

A. $\frac{1}{2}$ B. 10   C. $\frac{2}{3}$ D. $\frac{1}{3}$ E. $\frac{1}{10}$

6. If 5x + 8 = 28 then x is equal to

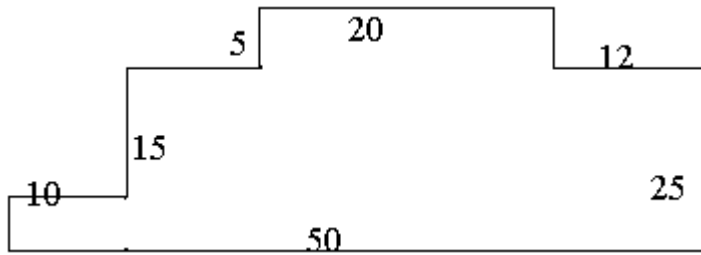A. $\frac{36}{5}$ B. 4   C. 20   D. 15   E. 31

7. $2\frac{1}{3} \times 3\frac{1}{2} =$

A. $6\frac{1}{6}$ B. $5\frac{5}{6}$ C. $8\frac{1}{6}$ D. $6\frac{5}{6}$ E. $\frac{2}{3}$

8. $42 - 6^2/2 =$

A. 3   B. 24   C. 338   D. 50   E. -24

9. What is the perimeter of the figure shown below.

A. 80   B. 110   C. 137   D. 160   E. 1500

10. A hotel charges $120 per day for a room, plus the occupancy tax which is 15%. If these are all of the charges, what does this room cost for one day?

A. $18.00   B. $102.00   C. $135.00   D. $138.00   E. $180.00

The following questions would only appear on the test that required the use of a calculator.

11. Which of the following is the best approximation for $(1.06)^5$.
A. 1.30   B. 1.34   C. 5.30   D. 8.00   E. 10.49

12. Which of the following is the best approximation for $7 - \dfrac{1}{5 - \sqrt{2}}$
A. -.214   B. 5.386   C. 6.721   D. 1.673   E. 6.093

13. It takes 8 gallons of fuel to keep a motor running for 2.5 hours. If 20 gallons of fuel are available, how long can the motor be kept running?
A. 64 hours   B. 8 hours   C. 6 hours 25 minutes   D. 6 hours 15 minutes   E. 1 hour

14. A survey is sent to 650 people. 72% of these people returned the survey. How many people returned this survey?
A. 468   B. 72   C. 578   D. 47   E. 903

Answers: 1. C, 2. D, 3. C, 4. A, 5. D, 6. B, 7. C, 8. B, 9. D, 10. D, 11. B, 12. C, 13. D, 14. A