

Practice Problems 3

1. Calculate the value of:

$$((1 \times 2 \div (3 \times 4) - 5) \times 6) \div (8 \times (-9))$$

- A** 29/72 **B** 189/8 **C** 7/24 **D** 1/72 **E** 7/8

2. A prime is a number which is divisible by no integer other than 1 and itself. If 199 is a prime, what is the next prime number?

- A** 211 **B** 213 **C** 217 **D** 219 **E** 221

3. Four of the numbers below are equal to the others. Which number is the not?

- A** 0.4 **B** 40% **C** $\frac{2}{5}$ **D** $\frac{1}{3} + \frac{1}{15}$ **E** $\frac{1}{2} - \frac{3}{8}$

4. The product of two numbers is 504. Although neither of the numbers is 6, both are divisible by 6. What is the larger of the two numbers?

- A** 12 **B** 24 **C** 30 **D** 36 **E** 42

5. Give the smallest number which is exactly divisible by 2, by 3, by 4, by 5 and by 6.

- A** 12 **B** 30 **C** 60 **D** 120 **E** 720

6. You have 324 coins and divide them into two piles, in the ratio of 1:2. The smaller of the two piles is then divided into two additional piles which are in the ratio of 3:1. How many coins are in the smallest of the piles?

- A** 27 **B** 54 **C** 81 **D** 108 **E** 216

7. A train which is 100 meters long is traveling at a speed of 90 km per hour. How many seconds will it take for this train to pass completely through a 300 meter tunnel?

- A** 4 **B** 8 **C** 12 **D** 16 **E** 20

8. Which of the following numbers is closest to the square root of two hundred million?

- A** 1400 **B** 4500 **C** 14,000 **D** 45,000 **E** 100,000,000

9. Which of the following is closest in value to 0.15×1.82 ?

- A** .0273 **B** .273 **C** 2.73 **D** 27.3 **E** 273

10. How many factors, including 1 and 189, does 189 have?

- A 4 B 6 C 7 D 8 E 10

11. What is one third of 299?

- A 33 B $99\frac{1}{3}$ C $99\frac{2}{3}$ D $100\frac{2}{3}$ E 897

12. To the nearest whole number, what is the mean number of letters per word in this sentence?

- A 2 B 3 C 4 D 5 E 6

13. If you write all the whole numbers from 1 to 500 in a row, what will be the 500th digit?

- A 0 or 1 B 2 or 3 C 4 or 5 D 6 or 7 E 8 or 9

14. The average age of six children is 13 years and 5 months. A seventh child joins the group, increasing the average age by two months. How old is this seventh child?

- A 13 yr 7 mo B 13 yr 9 mo C 14 yr 5 mo D 14 yr 7 mo E 14 yr 9 mo

15. What digit does B represent in the following subtraction?

$$\begin{array}{r} 131B \\ -BB2 \\ \hline A4A \end{array}$$

- A 0 or 1 B 2 or 3 C 4 or 5 D 6 or 7 E 8 or 9

A	A	E	E	C	A	D	C	B	D	C	C	A	D	D
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