TB(1A) Ch. 0 Basic Mathematics

Multiple Choice Questions

1. [11-12 Standardized Test 1, 1]

Find the result of dividing 24 by the product of 4 and 3.

A. 2

B. 18

C. 32

D. 286

2. [11-12 Standardized Test 1, 2]

Express 612 as a product of prime factors.

A. 2×3

B. $2 \times 2 \times 17$

C. $2 \times 2 \times 3 \times 17$

D. $2 \times 2 \times 3 \times 3 \times 17$

3. [11-12 Mid-year]

Find the L.C.M. of 6, 12 and 14.

A. 2

B. 84

C. 168

D. 252

4. [12-13 Standardized Test 1]

Arrange $\frac{7}{11}, \frac{7}{12}, \frac{8}{11}, \frac{8}{12}$ in ascending order.

A. $\frac{7}{12} < \frac{7}{11} < \frac{8}{12} < \frac{8}{11}$

B. $\frac{7}{12} < \frac{8}{12} < \frac{7}{11} < \frac{8}{11}$

C. $\frac{7}{11} < \frac{7}{12} < \frac{8}{11} < \frac{8}{12}$

D. $\frac{7}{11} < \frac{8}{11} < \frac{7}{12} < \frac{8}{12}$

5. [12-13 Standardized Test 1]

Which of the following are false?

I. $-1^3 = (-1)^3$ II. $-\frac{7}{8} > -\frac{3}{4}$

III. $-0.0777 > -7.7\%$

A. I and II only
B. I and III only
C. II and III only
D. All of the above

6. [12-13 Standardized Test 1]

Find the L.C.M. of 84 and 90.

A. 2×3
B. $2^2 \times 3 \times 7$
C. $2 \times 3 \times 5 \times 7$
D. $2^2 \times 3^2 \times 5 \times 7$

7. [12-13 Mid-year 11]

Which of the following is / are correct?

I. $\frac{3}{5} < \frac{11}{8} < 1\frac{2}{5} < \frac{10}{7}$

II. The L.C.M. of 3, 4 and 6 is 24.

III. 1 is a prime number.

A. I only
B. III only
C. I and III only
D. II and III only

8. **[13-14 Standardized Test 1]**

The sum of a number and its opposite number must be

A. zero.
B. a natural number.
C. a positive number.
D. a negative number.

9. **[13-14 Standardized Test 1]**

Which of the following expressions are the H.C.F. and L.C.M. of $2^3 \times 3^2 \times 5$ and $2^2 \times 3^3 \times 7$?

	H.C.F.	L.C.M.
A.	$2^2 \times 3^2$,	$2^3 \times 3^3$
B.	$2^2 \times 3^2$,	$2^3 \times 3^3 \times 5 \times 7$
C.	$2^3 \times 3^3$,	$2^2 \times 3^2$
D.	$2^3 \times 3^3$,	$2^2 \times 3^2 \times 5 \times 7$

10. **[13-14 Standardized Test 1]**

Let n be a natural number. Which of the following is/are true?

I. $2n$ must be an even number.
II. $n + 1$ must be an odd number.
III. n, $n + 1$ and $n + 2$ must be consecutive natural numbers.

A. I and II only
B. I and III only
C. II and III only
D. I, II and III only

11. **[13-14 Mid-year Exam]**

It is given that a is a positive even number. Which of the following statement(s) must be true?
I. $3a$ is even.
II. $3 - a$ is a natural number.
III. $a^3 - 1$ is odd.

A. I only
B. I and III only
C. II and III only
D. I, II and III

12. **[14-15 Mid-year Exam]**

Which of the following is/are true?

I. 0 is a natural number.

II. $\frac{12}{12}$ is an improper fraction.

III. 1 is a prime number.

A. I only
B. II only
C. I and III only
D. II and III only

13. **[14-15 Final Exam]**

Express 308 as a product of prime factors.

A. $2 \times 2 \times 3 \times 7$
B. $2 \times 2 \times 3 \times 11$
C. $2 \times 2 \times 7 \times 11$
D. $2 \times 2 \times 3 \times 7 \times 11$

14. **[14-15 Final Exam]**

'Divide *a* by *b*, then multiply the quotient by the result of subtracting *c* from *d*' may be represented by

A. $\frac{a(d-c)}{b}$.
B. $\frac{a(c-d)}{b}$.
C. $\frac{b(d-c)}{a}$.
D. $\frac{b(c-d)}{a}$.

15. [15-16 Mid-year Exam]

Which of the following must be true?

I. All whole numbers are natural numbers.
II. 0 is neither an even number nor an odd number.
III. 0 is an integer.

A. I only
B. II only
C. III only
D. All of the above

16. [15-16 Mid-year Exam]

If $\frac{a}{2}+\frac{a}{3}+\frac{a}{4}=65$, then a =

A. 5.
B. 6.
C. 9.
D. 60.

17. [15-16 Final Exam, #1]

Which of the following is / are correct?

I. 0 is a natural number.
II. 1 is a prime number.
III. 4 is a composite number.

A. III only
B. I and II only
C. I and III only
D. I, II and III

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