ALC Liberal Arts

Unit 1

1. The numbers in the set {… , -4, -3, -2, -1, 0, 1, 2, 3, 4, …} are

 a. even integers

 b. finite set

 c. infinite set

 d. integers

2. A set in which a whole number can be used to represent its number of elements; a set that has bounds and is limited is called a(an)

 a. even integers

 b. finite set

 c. infinite set

 d. integers

3. The numbers that result from multiplying a given whole number by the set of whole numbers are called

 a. integers

 b. irrational number

 c. multiples

 d. natural numbers (counting numbers)

4. A real number that can be expressed as a ratio of two integers

 a. pi (p)

 b. rational number

 c. real numbers

 d. whole number

5. {2, 3, 4, 5, 6} can be best described as

 a. {counting numbers between 1 and 7}

 b. {even integers between -3 and 4}

 c. {first five counting numbers}

 d. {first four whole numbers}

6. Which of the following sets are infinite

 a. {counting numbers between 2 and 10}

 b. {first five counting numbers}

 c. {real numbers between 6 and 8}

 d. {integers less than 1,000,000}

7. A set with no elements or members

 a. null set (ø) or empty set

 b. positive numbers

 c. repeating decimal

 d. terminating decimal

8. A decimal that contains a finite (limited)number of digits

 a. null set (ø) or empty set

 b. positive numbers

 c. repeating decimal

 d. terminating decimal

9. A number and its opposite whose sum are zero (0)

 a. additive inverses

 b. element or member

 c. grouping symbol

 d. negative numbers

10. The order in which two numbers are added or multiplied does *not* change their sum or product, respectively

 a. associative property

 b. commutative property

 c. exponent

 d. multiplicative identity

11. Any two numbers with a product of 1

 a. associative property

 b. commutative property

 c. exponent

 d. multiplicative identity

12. The way in which three or more numbers are grouped for addition or multiplication does *not* change their sum or product, respectively

 a. associative property

 b. commutative property

 c. exponent

 d. multiplicative identity

13. 36,000 written in scientific notation is

 a. 3.6 × 103

b. 0.36 × 104

 c. 3.6 × 104

 d. 3.6 × 10-4

14. 6.34 × 10-4 written as an ordinary number is

 a. 63400

 b. 634000

 c. 0.00634

 d. 0.000634

15. Evaluate (-3)(5)(-2)$(\frac{4}{3})$

 a. -40

 b. 40

 c. $\frac{40}{3}$

 d. $-\frac{40}{3}$

16. Evaluate $\frac{(6)(-5)(3)}{9}$

 a. -10

 b. 19

 c. 10

 d. 1

17. Evaluate ($\frac{1}{2}$)(-4)(0)(5)

 a. 0

 b. -10

 c. 10

 d. 5

18. Evaluate $\frac{3\left(3+2\right)-3×3+2}{3×2+2(2-1)}$

 a. $\frac{24}{27}$

 b. 1

 c. 24

 d. -1

19. $\left[\frac{7-(-3)}{5-3}\right] \left[\frac{4+(-8)}{3-5}\right]$

 a. 0

 b. -10

 c. 10

 d. 5

20. $\left\{4-2\left[\frac{5-(-4)}{2+1}-\frac{6}{3}\right]\right\}+1$

 a. 3

 b. -3

 c. 0

 d. 1