

Name \_\_\_\_\_

Math 162 Online Fall Term 1

Date \_\_\_\_\_

Unit 3 Quiz

### Chapter 5

Decide Whether each state is True or False

1. Every Natural Number is divisible by 1 \_\_\_\_\_.
2. 1 is the least prime Number \_\_\_\_\_.
3. There are no even Prime numbers \_\_\_\_\_.
4. If  $n$  is a natural number and  $9|n$ , then  $3|n$  \_\_\_\_\_.
5. If 16 divides a natural number, then 2, 4, and 8 must also divide that natural number \_\_\_\_\_.
6. Euclid's proof of the infinitude of prime is a proof by contradiction. \_\_\_\_\_.
7. In the Times of Euclid, mathematicians had not achieved elegance in their proofs \_\_\_\_\_.
8. Every natural number of the  $4k + 1$  is prime \_\_\_\_\_.
9. There are infinitely many numbers \_\_\_\_\_.
10. The prime numbers 2 and 3 are twin primes \_\_\_\_\_.
11. Any prime number must be deficient \_\_\_\_\_.
12. Two even natural numbers cannot be relatively prime \_\_\_\_\_.
13. There is no prime number  $p$  such that the greatest common factor of  $p$  and 2 is \_\_\_\_\_.
14. Two Natural numbers must have at least one common factor \_\_\_\_\_.
15. The least common multiple of two different primes is their product \_\_\_\_\_.

### Chapter 6

Give a number that satisfies the given condition

16. An integer between 4.5 and 5.5 \_\_\_\_\_.
17. A whole number that is not positive and is less than 1 \_\_\_\_\_.
18. A real number that is neither negative nor positive \_\_\_\_\_.

Fill in each blank with the correct response

19. The sum of two negative numbers will always be a \_\_\_\_\_ number (positive/negative).
20. The sum of a number and its opposite will always be \_\_\_\_\_.
21. Explain in words how to add signed numbers. Consider the various cases and give example.

Decide whether each statement is True or False

22. 300 % of 12 is 36 \_\_\_\_\_.
23. 25% of a quantity is the same as  $\frac{1}{4}$  of that quantity \_\_\_\_\_.
24. To find 50% of a quantity, we may simply divide the quantity by 2 \_\_\_\_\_.
25. 30 is more than 40% of 120 \_\_\_\_\_.