Name: _____   Date: _____

Algebra I

Directions: For questions 1 – 21: Determine whether the statement is **True** or **False** and write your answer on the line provided.

1. Every real number is a rational number.   _____

2. Every rational number is a real number.   _____

3. Every irrational number is a real number.   _____

4. Every real number is an irrational number.   _____

5. Every integer is a rational number.   _____

6. Every whole number is a natural number.   _____

7. Every natural number is a whole number.   _____

8. 0.3535…is an example of an irrational number.   _____

9. Some numbers are both irrational and rational.   _____

10. 2/3 is an example of an irrational number.   _____

11. Given set A = {5, 7, 9} and set B = {d, g, f}, set A and set B are equal sets.   _____

12. 4 ∈ {Natural numbers}.   _____

13. Mary ∈ {Joe, Bobby, Danny}.   _____

14. π is an example of a rational number.   _____

15. Counting numbers begin with 0.   _____

16. 0.3434… is an example of an irrational number.   _____

17. -1.5 is an example of an integer.   _____

18. {4, 8, 12} and {8, 12, 4} are equivalent sets.   _____

19. 5 ∈ {integers}   _____

20. {0,1,2…} is an example of natural numbers.   _____

21. {1, 2, 3...} is an example of infinite set.   _____

Directions: For questions 22 – 25, identify the number set(s) each term belongs in.
a. Real #s   b. Irrational #s   c. Rational #s   d. Integers   e. Whole #s   f. Natural #s

22. -5   23. $\frac{2}{5}$ 24. 8   25. Π

Directions: For questions 26 – 30, write your answer on the line provided.

26. A natural number greater than 12 and less than 13 is part of what set? _____

27. Members of a given set are called: _____

28. Set of whole numbers greater than 9 and less than 10 is an example of_____

29. 1/6 is an example of a _____ # and _____#.

30. π is an example of a _____ # and _____#.