Identify the following type of number as Natural, Whole, an Integer, Rational, Real, Irrational, Imaginary, or Complex

1. -3 2. $\frac{2}{3}$ 3. π 4. $\sqrt{-1}$

5. $3 + 2i$ 6. $\frac{7}{2}$ 7. $\sqrt{-16}$ 8. 3.25

9. What type of number is the product of 3 and $\sqrt{3}$? Show how know.

10. What type of number is the sum of ⅔ and 7? Show how you know.

11. What type of number is the sum of -34 and π? Show how you know.

12. What type of number do you get if you add a real number to a complex number? Show how you know.

13. What type of number do you get if you divide a whole number by a different whole number? Show how you know.

14. What type of a number do you get if you subtract a rational from a different rational? Show how you know.

15. What type of number do you get if you multiply an irrational to an irrational? Show how you know.

(Note: For # 16-22 the answer can be none, and use different numbers than those shown in class and on the previous side)

Give an example of a number that is:

16. A whole number, but not a natural number.

17. An integer, but not a whole number.

18. A real number, but not a rational number.

19. A whole number, but not a rational number.

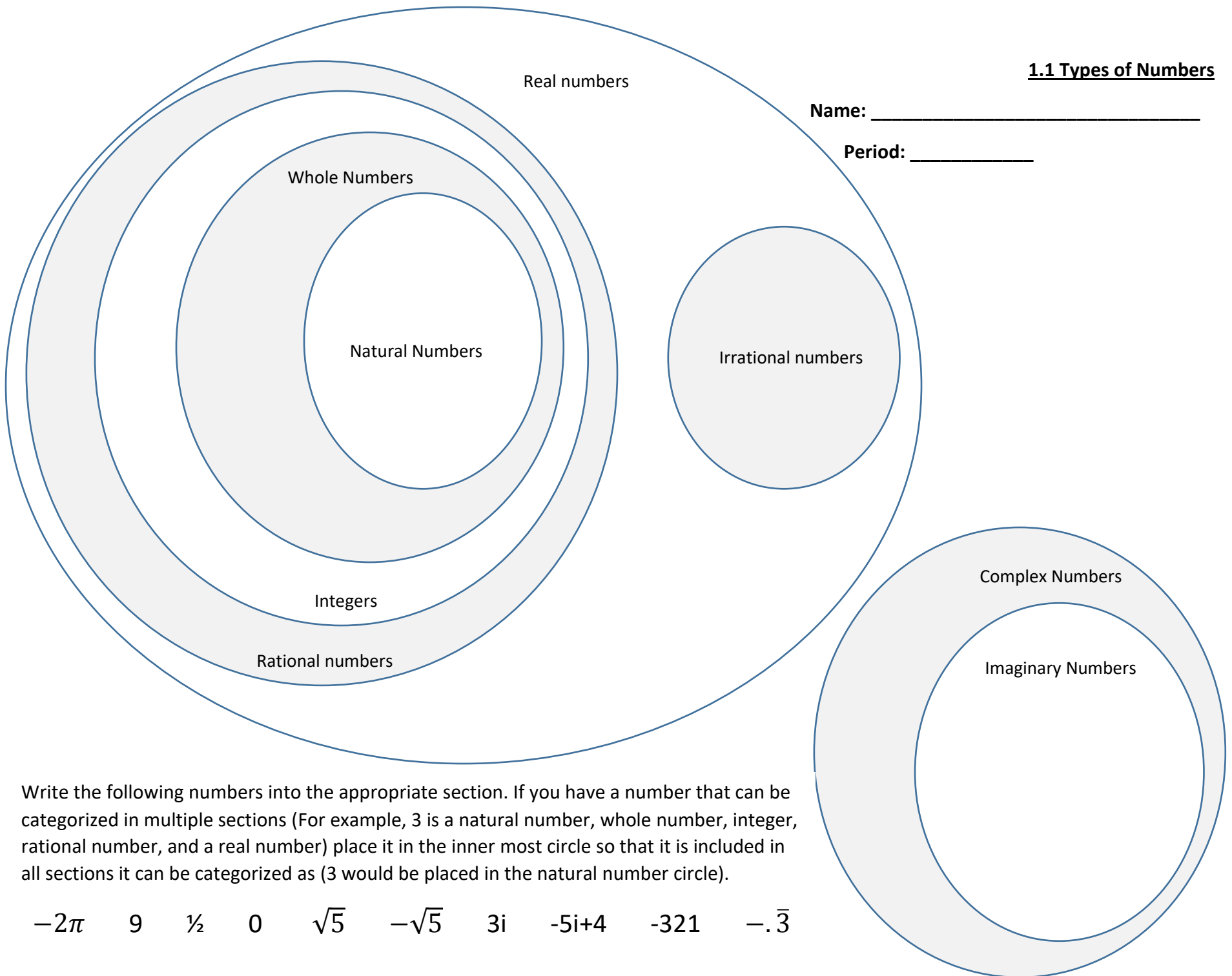20. An irrational number, but not a real number.

21. A rational number, but not an integer.

22. A complex number, but not an imaginary number.

Name: _____

Period: _____

Real numbers

Whole Numbers

Natural Numbers

Irrational numbers

Integers

Rational numbers

Complex Numbers

Imaginary Numbers

Write the following numbers into the appropriate section. If you have a number that can be categorized in multiple sections (For example, 3 is a natural number, whole number, integer, rational number, and a real number) place it in the inner most circle so that it is included in all sections it can be categorized as (3 would be placed in the natural number circle).

-2π 9   ½   0 $\sqrt{5}$ $-\sqrt{5}$ 3i   -5i+4   -321 $-.\overline{3}$