Principles of Algebra Name/Date Clee / Today

ALL PROBLEMS CAN BE COMPLETED ON THIS WORKSHEET

WS 1F.1 – Subsets of the Real Numbers

#1-10, Circle each subset of the reals to which each number belongs.

1. 0	natural	**whole**	**integer**	**rational**	irrational	**real**
2. 7	**natural**	**whole**	**integer**	**rational**	irrational	**real**
3. $\sqrt{49}$	**natural**	**whole**	**integer**	**rational**	irrational	**real**
4. $\sqrt{50}$	natural	whole	integer	rational	**irrational**	**real**
5. 9.4	natural	whole	integer	**rational**	irrational	**real**
6. $9.\overline{4}$	natural	whole	integer	**rational**	irrational	**real**
7. -9.4	natural	whole	integer	**rational**	irrational	**real**
8. -9	natural	whole	**integer**	**rational**	irrational	**real**
9. 6π	natural	whole	integer	rational	**irrational**	**real**
10. $\frac{7}{3}$	natural	whole	integer	**rational**	irrational	**real**

11. List every integer between -4.5 and 5.3.

positive or negative whole number or zero

$-4, -3, -2, -1, 0, 1, 2, 3, 4, 5$

12. List every natural number between -4.5 and 5.3.

counting numbers

$1, 2, 3, 4, 5$

13. List every whole number between -4.5 and 5.3.

Zero plus the counting numbers

$0, 1, 2, 3, 4, 5$

14. When written as a decimal, irrational numbers repeat / **do not repeat.** (circle one)

15. Irrational numbers can / **cannot** be written as a fraction. (circle one)

16. Repeating decimals are **rational** / irrational. (circle one)