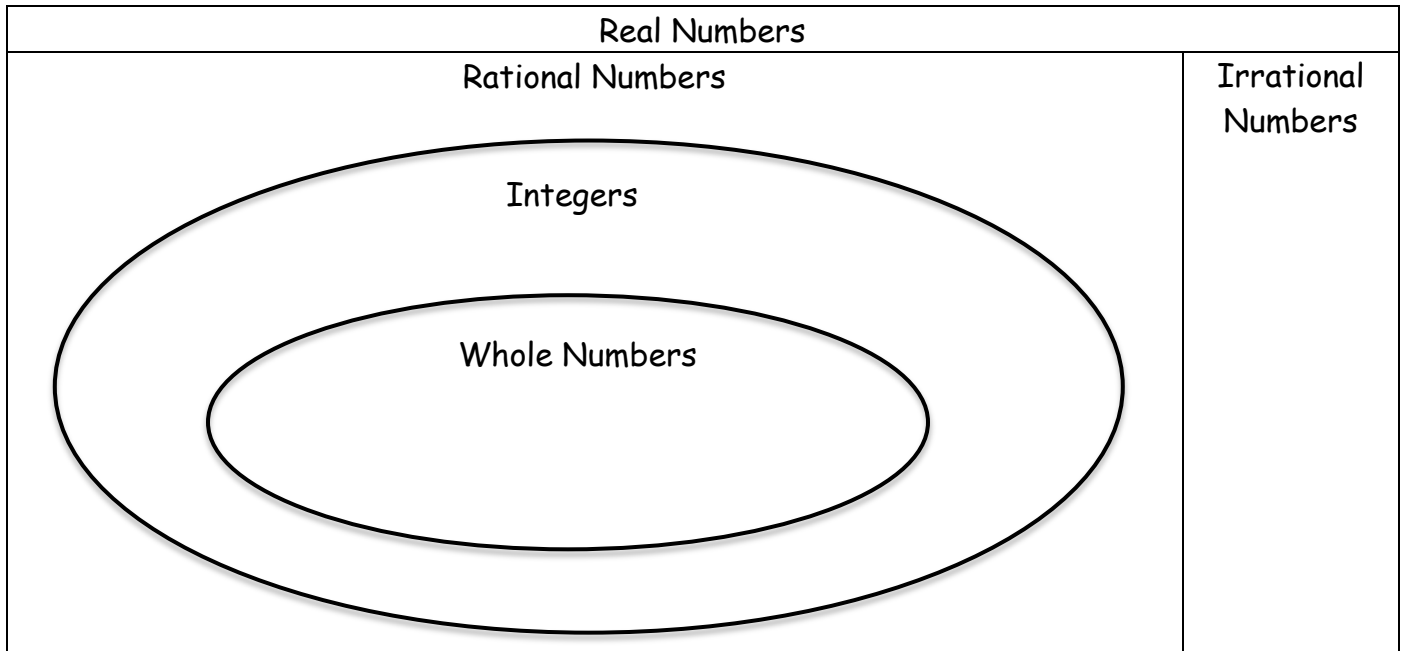Name: _____   Date: _____

Determining Rational/Irrational Homework

A. Place the following numbers in the Venn diagram:

$\sqrt{9}$	257	16.6	$\sqrt{16}$	$5.\overline{3}$	$7.\overline{54}$	$\sqrt{\dfrac{3}{8}}$	$-\sqrt{100}$	$\sqrt{24}$	$\dfrac{\pi}{2}$	$-\dfrac{18}{6}$	$\dfrac{7}{8}$	$\sqrt{50}$	$8\frac{1}{2}$	$-2\sqrt{4}$	$\sqrt{\dfrac{1}{16}}$

Real Numbers

Rational Numbers

Integers

Whole Numbers

Irrational Numbers

B. Compare the following with >, <, =

1. $\sqrt{3} + 5$ ☐ $3 + \sqrt{5}$

2. $\sqrt{2} + 4$ ☐ $2 + \sqrt{4}$

3. $-2\sqrt{9}$ ☐ $-\dfrac{18}{3}$

4. $2(\sqrt{16} + 5)$ ☐ $2\sqrt{16} + 5$

C. Four students have found the perimeter of a forest using different methods. Their results are given in the table. Order their calculations from greatest to least.

Forest Perimeter (km)			
Sydney	Gracie	Parker	Caden
$\sqrt{17} + 2$	2.5	$\dfrac{12}{5}$	$1 + \dfrac{\pi}{2}$