Methods and vocabulary reminders:

Make sure on your calculator you know how to do the following functions: How to make numbers **negative**, **square** a number, **cube** a number, find the **square root** of a number, where the **π button** is for approximation and how to make fractions or mixed numbers into decimals. It is best to change numbers into decimal form to assist you when **ordering real numbers.**

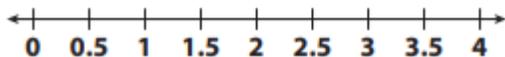| Homework Feedback |
| --- |
| You understand this. ☺: ❑ |
| Correct a few questions. ☺: ❑ |
| Repair. **Resubmit** for credit. ☹: ❑ |
| **Extra Help** might be needed.   ☺: ❑ |

Vocabulary: increasing, decreasing, ascending, descending, least and greatest.

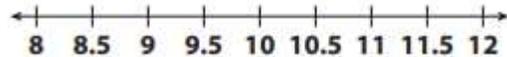1. Using your calculator find the value of each real number to the **nearest 100th.**

a. $\dfrac{13}{18}$	b. $\sqrt{5}$	c. 17^2	d. $-\dfrac{14}{5}$
e. $\dfrac{2}{13}$	f. π	g. $-\sqrt{20}$	h. 7^3
i. π^3	j. $-\sqrt{109}$	k. 8.7^2	l. $\sqrt{2}$

2. Order the three numbers given from **least to greatest** and place them on the number line in their **approximate location.**

a.

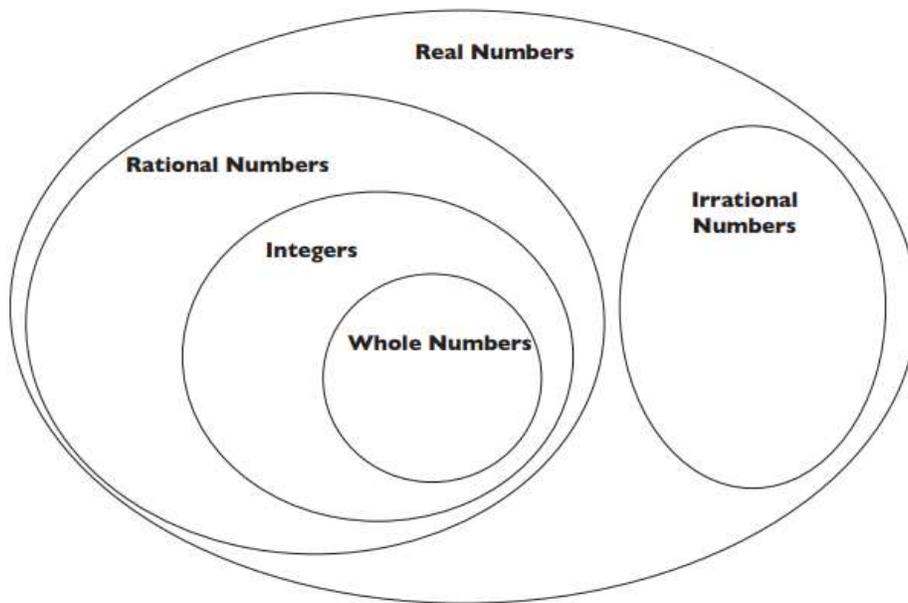$\sqrt{5}, 2.5, \sqrt{3}$ _____

b.

$\pi^2, 10, \sqrt{75}$ _____

3. Put a **check mark** ☑ in each box showing what set each real number belongs to.

	Whole Numbers	Integers	Rational Numbers	Irrational Numbers	Real Numbers
-7					
¾					
$\sqrt{2}$					
5					
0.398					

4. Place each of the given real numbers in their correct location on the given **Venn Diagram.**

$$\left(-6,\ 2.73,\ \frac{3}{7},\ \sqrt{2},\ \sqrt{9},\ -100,\ 0,\ \pi,\ 1,\ -\frac{1}{2},\ -3.8,\ 5.\overline{42},\ 8.293017...\right)$$

Real Numbers

Rational Numbers

Irrational Numbers

Integers

Whole Numbers

5. Answer **True** or **False.**

a. All integers are rational. _____

b. A rational number must be a whole number. _____

c. Some irrational numbers are integers. _____

d. All irrational numbers are real numbers. _____

e. No whole numbers are integers. _____

6. Write each set in **ascending order.**

1) $0, -\sqrt{2}, \sqrt{5}, \frac{13}{4}$ _____ , _____ , _____ , _____

2) $3, \sqrt{10}, \frac{3}{4}, -1.5$ _____ , _____ , _____ , _____

3) $2, -\frac{3}{7}, 0.75, -\frac{3}{2}$ _____ , _____ , _____ , _____