$\qquad$ Class Period:

## 8th Math Agenda

| Week 1.2 |  |  |  | Stamp | Grade |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \frac{8}{3} \\ & \frac{3}{3} \\ & 3 \end{aligned}$ | 8/31/2015 | Objective: | Scientific Notation |  |  |
|  |  | Homework: | Complete Homework |  |  |
| $\begin{aligned} & 8 \\ & 8 \\ & 8 \\ & 8 \\ & 8 \end{aligned}$ | 9/1/2015 | Objective: | Sets and Subsets |  |  |
|  |  | Homework: | Complete Homework |  |  |
|  | 9/2/2015 | Objective: | ' Test |  |  |
|  |  | Homework: | Complete Homework |  |  |
| Thunsday | 9/3/2015 | Objective: | Write Equations \& Situations for Equations |  |  |
|  |  | Homework: | Complete Homework |  |  |
| $\frac{8}{8}$ | 9/4/2015 | Objective: | Write Inequalities \& Situations for Inequalities |  |  |
|  |  | Homework: | Complete Homework |  |  |
| irst Things First |  |  |  |  |  |

$\qquad$

## Practice - Sets and Subsets of Real Numbers

Textbook Volume 1 pgs 83-90
Name: $\qquad$ Date: $\qquad$ Period: $\qquad$

1. What would the best name for the set of numbers shown below be?
$-9,6,0,-14,120,-304,6$
2. Which of the numbers in the set below could be defined as an integer?

$$
-4,5,-\frac{2}{3}, 0,-4.5,-16,22,-5 \frac{1}{2}
$$


3. Which of the numbers in the set below could belong to the irrational number set?

$$
\begin{aligned}
& -6,-\frac{1}{3}, \sqrt{10}, \sqrt{25}, 4.576987 \ldots, 3.42 \overline{42} \\
& {[\text { two answers }]}
\end{aligned}
$$

4. Which of the following statements below is true?
I. All natural numbers are whole numbers.
II. All real numbers are either rational or irrational.
III. All negative numbers are integers
A. I and II
B. I only
C. II only
D. I, II, and III
5. State the most specific set that the numbers below would belong to.
A. $3.77 \times 10^{-9}$ $\qquad$
B. -6 $\qquad$
C. $\pi$ $\qquad$
D. $\frac{6}{2}$
E. $\frac{3}{2}$ $\qquad$
$\frac{\text { answer bank irrational , ratura }}{\text { rational rational, integer }}$
6. Place the numbers below in the Vean Diagram shown.

$$
5,0, \sqrt{10}, 15,5.99 \times 10^{4}, 1.8,-\frac{36}{6}
$$



Name: $\qquad$ Date: $\qquad$ Period: $\qquad$
Directions: For 1-4, match each situation to the inequality. There may be more than one inequality that matches each situation, and some may not match at all.

1. Charter-A-Bus charges $\$ 50$ plus $\$ 0.40$ a mile for renting a charter bus. Buses-4-U charges $\$ 35$ plus $\$ 0.55$ a mile. For what number of miles is Buses-4-U the less expensive company for renting a charter bus?
2. Ocean Adventures charges $\$ 50$ an hour to rent a sailboard plus $\$ 40$ for a wetsuit. Water Fun charges $\$ 35$ an hour to rent a sailboard plus $\$ 55$ for a wetsuit. When the will the cost of renting a sailboard and wetsuit be less at Ocean Adventures?
3. The Border Mobile Cell Company charges $\$ 40$ per month plus 55 cents per minute while Central Cell Company charges no monthly fee but 40 cents per minute. When will the number of minutes, for $x$ Border Cell Company would be less expensive than Central Cell Company in a month?
a. $40+0.55 x<0.40 x$
b. $50 x+40<35 x+55$
c. $50+0.4 x>35+0.55 x$
d. $35 x-5.50 \geq 40 x-4$
e. $35+0.55 x<50+0.4 x$
f. $35 x+5.5 \geq 40 x+4$
g. $0.40 x>40+0.55 x$
4. Tees 4 U charges $\$ 35$ for each T-shirt and offers a $\$ 5.50$ discount off the total number of $T$-shirts Purchased. T-time charges $\$ 40$ for each $t$-shirt and offers a $\$ 4.00$ discount. How many $T$-shirts must you buy at Tees $4 U$ for the total cost be the same or more than the amount of the total cost at T-Time?
5. Which situation best represents the inequality, $530-m \geq 125+2 m$ ?
A. Helen has $\$ 530$ to spend on a new washing machine. After she buys the new washing machine, she has less than the cost of two washing machines plus $\$ 125$. Let $m$ represent the amount Helen spent on the washing machine.
B. There are 530 calculators in the math closet at Berkner High School. The Algebra teachers took out enough one class set of calculators, and left at least 125 calculators plus 2 class sets in the closet. Let $m$ represent the number of calculators in each class set.
C. Jason is buying a cell phone plan. He had $\$ 530$ and then bought a cell phone plan. He now has less money than the cost of 2 cell phone plans plus a $\$ 125$ phone. Let $m$ represent the cost of each cell phone plan.
D. The Westwood cheerleaders began the week with 530 items to sell at a bake sale fundraiser.

They sold some items on Monday. At the end of the week they had at least 125 items left to sell. Let $m$ represent the number of items they sold on Monday.

$8^{\text {th }}$ grade Math
Show your work!
Due Friday
, Monday, 8/31/2015
Which fraction falls between points $A$ and $B$ on a number line?
A. $-\frac{3}{8}$

B. $-\frac{1}{8}$
C. $-\frac{3}{16}$
D. $-\frac{2}{3}$

## Tuesday, 9/1/2015

The average distance from Earth to the sun is about $9.3 \times 10^{7}$ miles. The average distance from Mars to the sun is about $1.4 \times 10^{8}$ miles. When both planets are at their average distance from the sun, how much farther is Mars from the sun than Earth?
A. $79,000,000 \mathrm{mi}$
B. $47,000,000 \mathrm{mi}$
C. $107,000,000 \mathrm{mi}$
D. $233,000,000 \mathrm{mi}$

Wednesday, 9/2/2015
TEST
Thursday 9/3/2015

- Look at notes

Friday 9/4/2015
This week in math class I learned

