Make sure to show all work on a separate sheet of paper. Full credit will only be given if work is turned in with all answers. Do not use a calculator.

| Monday | Tuesday |  | Wednesday | Thursday |
| :---: | :---: | :---: | :---: | :---: |
| 1. The $\sqrt{86}$ is between what two consecutive integers | 1. A relation is defined by the ordered pairs $\{(1,4)(3,6)(3,8)(9,-1)\}$ In order to be considered a function, which order pair or pairs should be removed from the relation and why? |  | 1. Write and solve an equation for the scenario. <br> A scuba diver is retrieving an article from the 270 feet below sea level. She can dive at a rate of 45 feet per 10 min. How many minutes will it take her to retrieve the article? | 1. Martha bakes cookies at a rate of 12 cookies per 10 minutes. Sally bakes 8 cookies every 6 min. Which woman bakes at a faster rate? How much faster? |
| 2. A square has an area of $81 \mathrm{in}^{2}$ and a cube has a volume of $125 \mathrm{in}^{3}$, what is the difference between the two side lengths? | 2. Identify whether each equation represents a linear or non-linear function. <br> (a) $Y=-x$ <br> (b) $Y=2 x+6$ <br> (c) $Y=x^{2}$ <br> (d) $Y=\frac{3 x+6}{2}$ <br> (e) $Y=x(x+3)$ |  | 2. Solve $X^{3}+26=242$ | 2. A line passes through the points $(5,3)$ and $(6,8)$ What is the slope of the line? |
| 3. Is the given graph a function? <br> Explain why or why not? | 3. Given the function. Identify the domain values. |  | 3. Solve$\frac{x}{6}+5=13$ | 3. Jamal swims 16 laps in 20 minutes Marie swims 20 laps in 24 minutes. If both swimmers swim for 60 minutes, who will swim more laps and how many more? |
|  | X | y |  |  |
|  | 0 | 2 |  |  |
|  | 4 | 6 |  |  |
|  |  |  |  |  |
| 4. Identify all real number categories for $-\frac{2}{5}$ | 4. Solve the equation$8(a+2)=5 a+16+3 a$ |  | 4. The sum of two consecutive integers is 95 . What are the two integers? | 4. A line passes through the points $(-9,5)$ and (-9,7). What is the slope of the line? |

Math 8
Weekly Math 6

