Sample Student Work – F

Post-Assessment

Name: [redacted]

Create your own version of the Number Game. You must create at least nine criteria. With at least four give examples of numbers that do and don't fit the criteria. Along with your nine criteria and examples you must give a list of ten numbers that would generate a high score. The game scoring criteria must include at least four different number types that are subsets of the real number system. Points awarded cannot exceed 10 in each one. Finally, give a few reasons why you selected the ten numbers that you did for the game.

9 Criteria – offer examples and non examples for at least four of the nine

1. 10 points for each irrational number
   ex. $-\sqrt{2}$, π, $\sqrt{31}$ non ex $\sqrt{49}$, $\sqrt{25}$, $\sqrt{9}$
2. 3 points for each natural number
   ex. 1, 2, 3, 4, 5... non ex. 0
3. 5 points for each fraction
   ex. 5/20, 1/2, 4/5 non ex. $\sqrt{3}$, $\sqrt{12}$
4. 4 points for each decimal

6/6

5. 7 points for each prime number
   ex. 2, 3, 5, 7 non ex. 4, 25, 16
6. 4 points for each rational number
7. 4 points for each integer
8. 9 points if your list contains a zero
9. 10 points if the sum of your numbers is more than 200

10 Numbers:

$\pi, -\sqrt{2}, \sqrt{3}, \sqrt{5}, \sqrt{12}, \sqrt{31}, 0, 2, .199, 5/10$ = *TOTAL POINTS* 193

Reasons for selecting them:

I choose these numbers because I wanted to get the highest points possible. The highest points you could of got was an irrational number and if the sum was over 200 so I made a lot of my numbers irrational. I also made sure the sum of them together was over 200.