**“Going Deeper” with the Standards of Mathematical Practice**

|  |  |  |
| --- | --- | --- |
| **Standard of Practice** | **Letter** | **How imagesCAK0IDR8.jpg demonstrates the Standard!** |
| 1. Make sense of problems and persevere in solving them.
 | FMath Problem | Raj took an aspirin and went right back to solving the problem; demonstrating his perseverance. |
| 1. Reason abstractly and quantitatively.
 | HSuperman | They are taking a situation in a movie and represented symbolically through physics. They did pause during the manipulation of the math to probe the accuracy of the theories being presented. |
| 1. Construct viable arguments and critique the reasoning of others.
 | GLoop vs. String | There was a case presented for both series as well as counterexamples for both. They responded to the validity of each explanation. Leonard listed to both sides and made a decision based on the facts. |
| 1. Model with mathematics.
 | EDo the Math | Sheldon took the “real world” situation of the odds of two people from different backgrounds being compatible and wanted to do the math of the probability. He took a complicated situation and applied what he has comfortable with to solve the problem. |
| 1. Use appropriate tools strategically.
 | CPowerPoint | Sheldon used a PowerPoint to convey why he should go to Switzerland over Penny. |
| 1. Attend to precision.
 | BMeet Hawking | Sheldon failed to attend to precision before giving the final copy to somebody else. |
| 1. Look for and make use of structure.
 | AFriendship Alogorithm | Sheldon took a complicated thing like friendship and broke it down into single objects in a flow chart. Howard noticed the infinite loop so he provided Sheldon with a way to step back and shift his perspective in order to solve the problem. |
| 1. Look for and express regularity in repeated reasoning.
 | DBest Number | Sheldon took the number 73 and broke it down in several way but found repeated calculations. He evaluated the reasonableness of all of his calculations to prove that it was the best number. |