|  |
| --- |
| **Swimming Relay– 6.NS.3** |
| **Domain** | **The Number System** |
| **Cluster** | **Compute fluently with whole numbers and find common factors and multiples.** |
| **Standard(s)** | **6.NS.3** Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation. |
| **Materials** | Activity sheet |
| **Task** | **Swimming Relay**At the swim meet the Tigers and the Hawks are tied heading into the last race, the 200 meter medley relay race. Below is information from the final race.

|  |  |  |
| --- | --- | --- |
|  | Tigers | Hawks |
| Back stroke | 32.45 seconds | 32.51 seconds |
| Butterfly | 29.89 seconds | 29.86 seconds |
| Breast stroke | 38.56 seconds | 38.57 seconds |
| Freestyle | 23.45 seconds | ? |

Part 1:What was the total time for the Tigers?Part 2:What was the time of the 3 swimmers for the Hawks?Part 3:The race was decided by only one hundredth of a second. What were the two possible times that the Hawks could have had for the freestyle part of the race? Part 4:Write an explanation about how you solved Part 3.  |

|  |
| --- |
| **Rubric** |
| **Level I** | 1. **Level II**
 | **Level III** |
| * Student uses inappropriate solution strategy and does not get the correct answer.
 | 1. Not Yet Proficient
* There are one or two errors.
 | Proficient in Performance * Accurately solves problem
* Part 1: 124.35 seconds.
* Part 2: 100.94 seconds.
* Part 3: The Hawks freestyle swimmer could have swam either 23.40 or 23.42 seconds.
* Part 4: The explanation is clear and accurate.
 |

|  |
| --- |
| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| 3. Constructs viable arguments and critiques the reasoning of others. |
| **4. Models with mathematics.** |
| 5. Uses appropriate tools strategically. |
| **6. Attends to precision.** |
| 7. Looks for and makes use of structure. |
| 8. Looks for and expresses regularity in repeated reasoning. |

**Swimming Relay**

At the swim meet the Tigers and the Hawks are tied heading into the last race, the 200 meter medley relay race. Below is information from the final race.

|  |  |  |
| --- | --- | --- |
|  | Tigers | Hawks |
| Back stroke | 32.45 seconds | 32.51 seconds |
| Butterfly | 29.89 seconds | 29.86 seconds |
| Breast stroke | 38.56 seconds | 38.57 seconds |
| Freestyle | 23.45 seconds | ? |

Part 1:

What was the total time for the Tigers?

Part 2:

What was the time of the 3 swimmers for the Hawks?

Part 3:

The race was decided by only one hundredth of a second. What were the two possible times that the Hawks could have had for the freestyle part of the race?

Part 4:

Write an explanation about how you solved Part 3.