

1. Andy says that 5.10 is greater than 5.9 because 10 is greater than 9. Use two different methods to explain to Andy why his statement is incorrect.

2. Following is the list of swimmers and their times for a particular race. Fill in the chart to show the place each swimmer finished. Explain your reasoning.

| Name | Time (in seconds) | Place |
|--------|-------------------|-------|
| Jordan | 43.3 | |
| Taylor | 43.4 | |
| Morgan | 43.05 | |
| Robin | 43.25 | |
| Skylar | 43.251 | |
| Bryce | 43.308 | |

3. Plot the following decimals on the number line below. Explain your reasoning.





4. Students from Lawrence Middle School are training for a biathlon. For one particular training session, the students swam for three minutes and then ran for thirty minutes. The coach recorded the distances that each student swam (0.69, 0.084, 0.833, 0.609, 0.069, and 0.056 kilometers) and ran (8.25, 4.95, 6.2, 9.1, 10.6, and 3.32 kilometers). After recording the swimming distances for two students, the coach forgot to write down the other distances next to the names. Use the following clues to help the coach complete the table. Explain your reasoning.

| Name | Swim Distance in km | Run Distance in km |
|---------|---------------------|--------------------|
| Nathan | 0.069 | |
| Stephen | 0.056 | |
| David | | |
| Abby | | |
| Lisa | | |
| Kendra | | |

- A) Lisa swam sixty-nine hundredths kilometers.
- B) The person that swam eight hundred thirty-three thousandths kilometers ran four and ninety-five hundredths kilometers.
- C) Nathan was not the one who ran eight and twenty-five hundredths kilometers.
- D) David swam less than eight hundred thirty-three thousandths kilometers.
- E) The number of kilometers Kendra swam, rounded to the nearest tenth, was eighttenths kilometers.
- F) The person that swam eighty-four thousandths kilometers ran three and thirty-two hundredths kilometers.
- G) Abby was not the one who ran six and two-tenths kilometers.
- H) The person that swam sixty-nine hundredths kilometers ran ten and six-tenths kilometers.
- I) Abby ran less than eight and twenty-five hundredths kilometers.
- J) The person that swam six hundred nine thousandths kilometers ran nine and one-tenth kilometers.

