



Solve addition and subtraction problems with decimals by using the standard algorithm, Practice Set B

Name:

Date:

1. Three teams are participating in a 100 mile relay race. Each team member runs a section of the race.

a. Using estimation only, which team is closest to the 100 miles? Support your answer with reasoning.

Team _____ is closest to the 100 miles.

Teammate Number	Team 1	Team 2	Team 3
#1	18.3 miles	20.6 miles	5.08 miles
#2	15.46 miles	17.78 miles	19.53 miles
#3	9.70 miles	3.1 miles	13.1 miles
#4	21.69 miles	19.93 miles	22.52 miles
#5	12.9 miles	15.42 miles	8.9 miles

B) Using estimation, about how many miles does each team need to run in order to complete the 100 miles?

Team #1 needs to run about _____ miles.

Team #2 needs to run about _____ miles.

Team #3 needs to run about _____ miles.



2. Each team wants to calculate how many miles they need in order to reach the 100 mile goal. Fill in the chart below with the total miles each team has completed and how many more miles they need to complete in order to reach the 100 mile goal.

Team	Total Miles Completed (Show all work)	Miles Needed to Complete (Show all work)
Team #1		
Team #2		
Team #3		

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Answer Key

1. Three teams are participating in a 100 mile relay race. Each team member runs a section of the race.

a. Using estimation only, which team is closest to the 100 miles? Support your answer with reasoning.

Team 1 is closest to the 100 miles.

Teammate Number	Team 1	Team 2	Team 3
#1	18.3 miles 18	20.6 miles 21	5.08 miles 5
#2	15.46 miles 15	17.78 miles 18	19.53 miles 20
#3	9.70 miles 10	3.1 miles 3	13.1 miles 13
#4	21.69 miles 22	19.93 miles 20	22.52 miles 23
#5	12.9 miles 13	15.42 miles 15	8.9 miles 9
Total:	78 miles	77 miles	70 miles

B) Using estimation, about how many miles does each team need to run in order to complete the 100 miles?

Team #1 needs to run about 22 miles.

Team #2 needs to run about 23 miles.

Team #3 needs to run about 30 miles.

There are other ways to estimate. In this example, the numbers were rounded to the nearest whole number. Students should be encouraged to show their work to support their estimation.

2. Each team wants to calculate how many miles they need in order to reach the 100 mile goal. Fill in the chart below with the total miles each team has completed and how many more miles they need to complete in order to reach the 100 mile goal.

Team	Total Miles Completed (Show all work)	Miles Needed to Complete (Show all work)
Team #1	$ \begin{array}{r} 18.3 \\ 15.46 \\ + 9.70 \\ 21.69 \\ \underline{12.9} \\ 78.05 \text{ miles completed} \end{array} $	$ \begin{array}{r} 100.00 \\ - \underline{78.05} \\ 21.95 \\ \text{miles needed to} \\ \text{complete} \end{array} $
Team #2	$ \begin{array}{r} 20.6 \\ 17.78 \\ + 3.1 \\ 19.93 \\ \underline{15.42} \\ 76.83 \text{ miles completed} \end{array} $	$ \begin{array}{r} 100.00 \\ - \underline{76.83} \\ 23.17 \\ \text{miles needed to} \\ \text{complete} \end{array} $
Team #3	$ \begin{array}{r} 5.08 \\ 19.53 \\ +13.1 \\ 22.52 \\ \underline{8.9} \\ 69.13 \text{ miles completed} \end{array} $	$ \begin{array}{r} 100.00 \\ - \underline{69.13} \\ 30.87 \\ \text{miles needed to} \\ \text{complete} \end{array} $