

Problem-Solving Application: Use Decimals

1. On October 13, 2002, British runner Paula Radcliffe set a new world's record for the women's marathon. She ran 26.2 miles in 137.3 minutes. The previous world's record was one minute and 29 seconds slower. What was Radcliffe's average speed per minute on her record-breaking run?

UNDERSTAND

How can I state the question in my own words?

PLAN

What operation will I use? Why?

SOLVE

How will I round the answer? The information in the question is stated to the nearest tenth. Does it make sense to round to the nearest thousandth?

How can I state my answer as a complete sentence?

LOOK BACK

What generalization can I make about how to round non-repeating decimals?

2. On October 24, 1999, Khalid Khannouchi set a record for the men's marathon by running 26.2 miles in 2 hours, 5 minutes and 42 seconds. One writer states this record by saying that Khannouchi took 125.42 minutes to complete the race. Why is this statement inaccurate?
