

Use Dimensional Analysis to Convert the Following

(Use the facts that you know about the number of minutes in an hour, seconds in a minute, inches in a foot and other facts that you might not know 1,000 meters = 1 kilometer; 1km= 0.621 miles)

1. 3 miles per hour equals how many miles per minute?
2. Two feet per second equals how many inches per second?
3. 11 inches per minute equals how many feet per second?
4. 2 kilometers per hour equals how many meters per hour?
5. 5 meters per second equals how many miles per second?

FOLLOWUP Questions

1. At the rate from question #1 of _____ miles per 1 minute, how many minutes would it take for somebody to run 7 miles?
2. At the rate from question #2 of 24 inches/1 second how many seconds would it take for a snail to move 57 inches?
3. At the rate from question #3 of _____ feet/1 second, how many minutes would it take to move 79 feet?
4. At the given rate of 2 kilometers per hour how many hours would it take for a runner to run a 10K race?
5. How many minutes would the answer to #9 be equivalent to?