1 Quiz

1. A car traveling at 35.3 miles/hour stops in 4.3 seconds. What is the average acceleration?[1]
   A. a) 2.06 x 10^0 m/s^2
   B. b) 3.67 x 10^0 m/s^2
   C. c) 6.53 x 10^0 m/s^2
   D. d) 1.16 x 10^1 m/s^2
   E. e) 2.06 x 10^1 m/s^2

2. A car completes a complete circle of radius 3.1 miles at a speed of 51 miles per hour. How many minutes does it take?[2]
   A. a) 7.25 x 10^0 minutes
   B. b) 9.66 x 10^0 minutes
   C. c) 1.29 x 10^1 minutes
   D. d) 1.72 x 10^1 minutes
   E. e) 2.29 x 10^1 minutes

3. A car traveling at 21.3 mph increases its speed to 24.2 mph in 1.4seconds. What is the average acceleration?[3]
   A. a) 9.26 x 10^{-1} m/s^2
   B. b) 1.65 x 10^0 m/s^2
   C. c) 2.93 x 10^0 m/s^2
   D. d) 5.21 x 10^0 m/s^2
   E. e) 9.26 x 10^0 m/s^2

4. Mr. Smith is backing his car at a speed of 3.28 mph when he hits a cornfield (seed corn). In the course of 1.92 seconds he stops, puts his car in forward drive, and exits the field at a speed of 5.66 mph. What was the "magnitude" (absolute value) of his acceleration?[4]
   A. a) 2.94 x 10^0 miles per hour per second
   B. b) 3.7 x 10^0 miles per hour per second
   C. c) 4.66 x 10^0 miles per hour per second
   D. d) 5.86 x 10^0 miles per hour per second
   E. e) 7.38 x 10^0 miles per hour per second

Notes

[1] a02_1Dkinem_definition placed in Public Domain by Guy Vandegrift: https://en.wikiversity.org/wiki/special:permalink/1828918

[2] a02_1Dkinem_definition placed in Public Domain by Guy Vandegrift: https://en.wikiversity.org/wiki/special:permalink/1828918

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