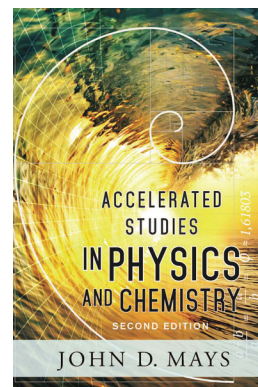


Accelerated Studies in Physics and Chemistry

Errata

We always strive to make our textbooks as accurate as possible, but sadly, errors are a reality. We very much appreciate friends who report errata that are not included in this document!

Please send new errata to info@novaescienceandmath.com



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Chapter 5

Energy Questions, Set 3

Exercise 3 should read: Imagine a new frictionless roller coaster that uses magnetic levitation so that the cars float above the rails without actually touching them. Imagine also that the aerodynamic design of the cars is so brilliant that there is essentially no air friction. The car has a mass of 5,122 kg. From the top of a 25.0 m-hill, the car rolls down a valley where the lowest point is 2.50 m above the ground, and then back up to the top of a lower hill, 18.0 m above the ground. Assuming the roller coaster begins at rest at the top of the first hill, determine how fast it is traveling when it reaches

- a. the bottom of the valley.
- b. the top of the second hill.

Answers:

- 1f. 111 J
- 1g. 4.26 m/s
- 1h. 5.71 m/s
- 3a. 21.0 m/s
- 3b. 11.7 m/s

Chapter 11

Density Exercises

The answer to #17 is 661,000 gal, 2,750 tons