(1) A bus leaves the bus depot, and travels east on a straight road at a constant velocity. 78 min after leaving the depot, the bus passes Melvin’s Donuts. 43 min after passing the donut shop, the bus arrives at its destination, George’s drugstore, which is located 30 miles east of Melvin’s Donuts. Find the distance from the bus depot to Mel’s donuts. Carefully follow the procedure described in class, using only equations introduced in class.

(2) A snail enthusiast is using a stopwatch to time a snail as it crawls along a meterstick. When the stopwatch reads 15.0s, the snail is at the 25.0 cm mark. When the stopwatch reads 53.8s, the snail is at the 35.0 cm mark. Find the time at which the snail crosses the 76.0 cm mark. Carefully follow the procedure described in class, using only equations introduced in class.

(3) A Datsun driving at a constant velocity of 35 mi/hr passes a mulberry bush. 5.0s later, a Kia traveling in the same direction passes the mulberry bush. 10.0s after passing the mulberry bush, the Kia passes the Datsun.
(a) Find the velocity of the Kia.
(b) How far were the cars from the mulberry bush at the moment the Kia passed the Datsun?

4. Textbook Problem 2-5
5. Textbook Problem 2-6
6. Textbook Problem 2-11
7. Textbook Problem 2-12
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9. Textbook Problem 2-28
10. Textbook Problem 2-32
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