

## Ch 2 #13

You should be able to get total time from simply adding the times from the two legs of the trip. But for average speed for the whole trip, be careful NOT to just average the two speed values. (It's not fair to average them unless they really both weigh equally on the total trip's speed.)

## Ch 2 #15

This one is a 2-step problem, but you have to start with the last step and then work backwards. Since you know info about how the sound wave travels back to the person, use that info to get the amount of time the sound wave travels. Then, the 2.5s of total time for the ball and the wave to travel can be used to figure out the ball's time of travel. Then finish by calculating the ball's speed, once you know its distance and time of travel.

## Ch 2 #30

This one's tough, and there are a couple ways to approach it. One way goes like this...

First figure out how much time it would take for the car behind the truck to pass the truck. To do this, it's easiest to think of the truck as the frame of reference (sitting still). You should be able to calculate 8.94s as the correct time.

Then figure out how far the car and the oncoming car move, relative to the ground, during this amount of time. If the total distance they cover is less than 400m, then everything's fine. But if it's more than 400m, well...

## Ch 2 #39

Once you have it set up, you should be able to use the quadratic formula to solve it.

## Ch 2 #47

To solve this one, you DON'T need to split the stone's motion into multiple parts. The kinematic formulas know how to deal with motions that start in one direction and turn around because of an acceleration in the opposite direction.

Just make sure the signs of all of your variables are correct, and you should be able to plug and chug (with the help of the quadratic formula).

## Ch 2 #49-51, 56

There might not be tons of work to show on these, which is okay. But **MAKE SURE** you try them first without looking at the answers, and then that you really understand the correct answers.