Average Velocity

Besides the graphical method, average velocity can be found using a formula:

Really the same formula as $v = \Delta d/\Delta t$, but implies that the velocity may not be constant for the total time.

ex.
A car goes 100 km in 0.9 hours, then 80 km in 0.7 hours, and finally 150 km in 1.5 hours. What is the car's average velocity?

ex.

A motorcycle travels 120 km/hr for 2 hr, slows down to 105 km/hr for 1 hr, and then speeds up to 135 km/hr for 0.5 hr. What is its average velocity?

(cannot add velocities and divide by three because does not account for different time intervals)

ex.

A vehicle travels 1 km through a town at 50 km/hr and then travels down the highway for 1 km at 100 km/hr. Find the vehicle's average velocity.