On December 14, 1972 at 10:54:37 p.m. GMT, Astronauts Eugene Cernan and Harrison Schmidt blasted off from the lunar surface in the Lunar Module (LM). The launch was recorded by a camera left behind at the landing site in the Taurus-Litrow region. A sequence of images from this recording is shown to the left.

The sequence of images runs from the top to the bottom. The top image was taken at 10:54:37.00 p.m. and the bottom image was taken at 4.9 seconds later at 10:54:41.87 p.m. The width of the LM is 4.3 meters. See the YouTube video of the LM launch at http://www.youtube.com/watch?v=iziumckIDbM&feature=related

Table of LM Heights and Times

Image	Time (seconds)	Height (meters)	Speed (m/s)
1	0	0	
2	1.8	2	
3	2.3	6	
4	2.9	10	
5	3.2	15	
6	3.7	18	
7	4.9	21	

Problem 1 - What is the average speed of the LM during the 4.9 seconds covered by this image sequence?

Problem 2 - What are the average speeds of the LM between Image 1 and A) Image 2? B) Image 3? C) Image 4? D) Image 5? E) Image 6? F) Image 7? Enter these speeds in the above table.