

- 3) You start a bicycle ride at the top of a hill. You coast down the hill with a constant acceleration of 2 m/s^2 . When you reach the bottom, you're moving at 18 m/s , and you pedal to maintain that speed. If you continue at that speed for one minute, how far will you have gone from the time you left the hilltop?

Honors question:

- 4) When driving at 15 m/s , I noticed that the traffic light ahead was red. I took my foot off the gas to coast. The car slowed down at 2.3 m/s^2 . When I had reached a speed of 4 m/s , the light changed back to green. I pressed the gas and accelerated back up to my original speed. The whole time from when I took my foot off the gas until I was back up to speed took 8.4 s .
- A) What was my acceleration after the light turned green?
- B) What total distance did I travel during the 8.4 seconds ?