

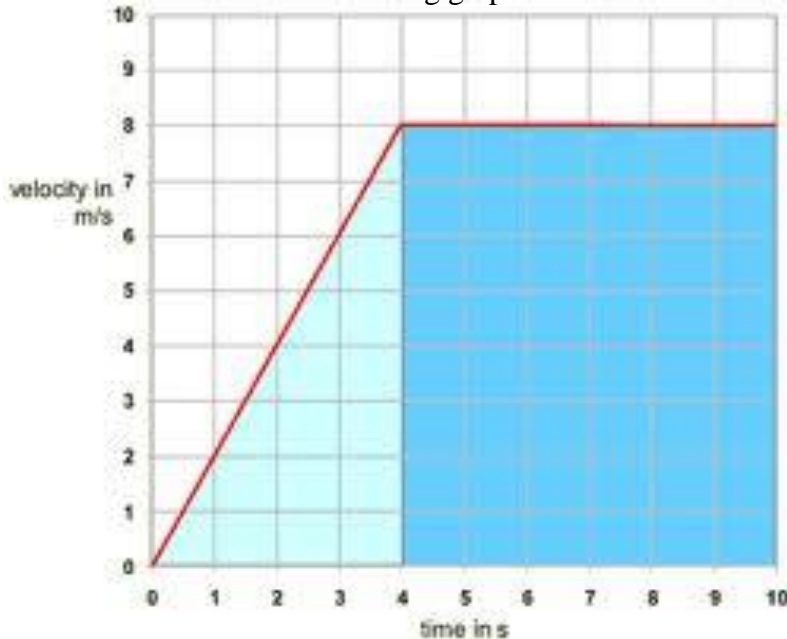
Science 10
Chapter 10 Test Review

Complete the following questions from your textbook:

Pg 410-411 #1, 2, 3, 7, 8, 9, 10,11,12,14

1. A runner covers the last straight stretch of a race in 4 s. During that time, he speeds up from 5 m/s to 9 m/s. What is the runner's acceleration in this part of the race?
2. If a sprinter accelerates at 2.2m/s^2 for 2.5s, what is her velocity after this time, assuming that $v_1 = 0$?
3. What is an objects initial speed if it accelerates at 2.0m/s^2 for 2.3 s and reached a final speed of - 50km/h? What is the initial speed in m/s?
4. An object accelerates at 9.81m/s^2 when falling. How long does it take an object to change its speed from 4.5m/s to 19.4m/s?

5. Given the following graph calculate



- a. The acceleration from 0s to 4s.
- b. The acceleration from 4s to 10s.
- c. The total distance travelled by the object.

6. a. Given the following table showing the acceleration of a motorcycle, create a velocity time graph then answer the following questions:

Time (sec)	Velocity(m/s)
0	0
1	25
2	50
3	75
4	75
5	75
6	55
7	35

- b. What is the acceleration from 0 seconds to 3 seconds?
- c. What is the acceleration from 3 seconds to 5 seconds?
- d. What is the acceleration from 5 seconds to 7 seconds?
- e. What is the distance travelled between 0 seconds and 5 seconds?