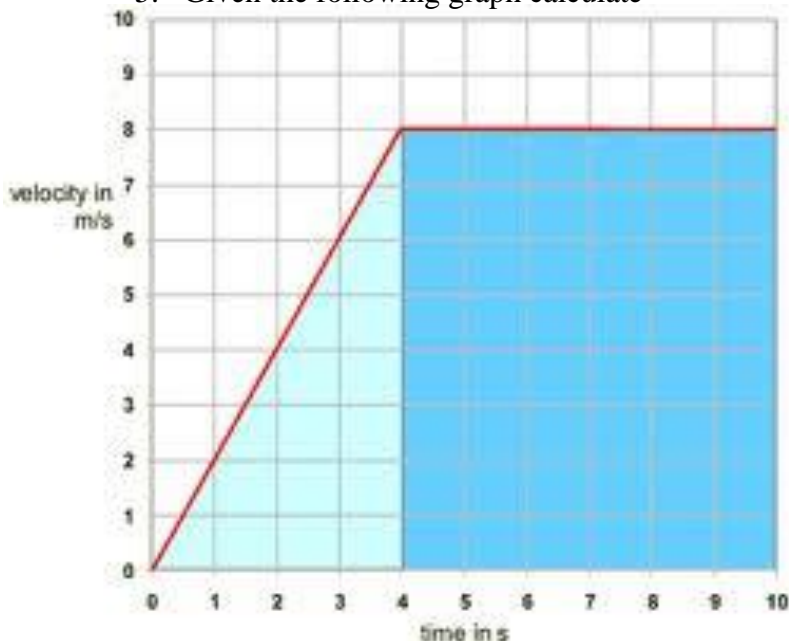Science 10
Chapter 10 Test Review

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 $2.2 m/s^2$ 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 $2.0 m/s^2$ 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 $9.81 m/s^2$ 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 Os 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?