SPH3U Task – Motion Name:

1. For the following velocity – time graph answer the following questions. (10 marks)

Velocity (m/s)

Time (sec)

4

2

6

12

17

0

2

4

6

1. What is the velocity at t = 4 sec, t = 12 sec and t = 17 sec?
2. What is the displacement at t = 4 sec, t = 12 sec and t = 17 sec?
3. On what time intervals does the rocket have (a) positive acceleration, (b) no acceleration, (c) negative acceleration.
4. Create an Acceleration-Time graph for the given object’s motion.

Acceleration (m/s2)

Time (sec)

0

17

2

12

6

4