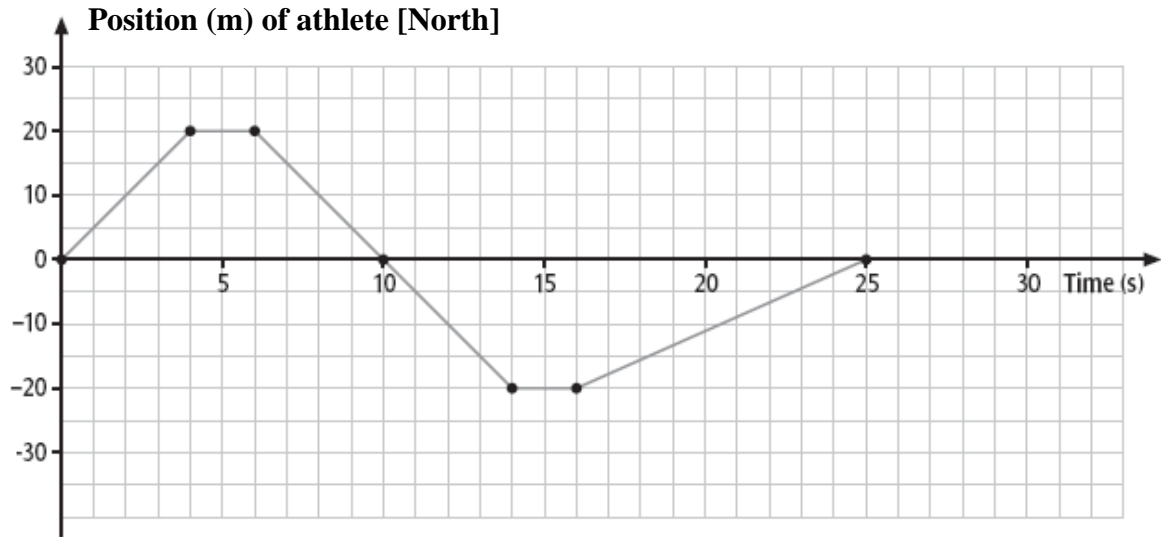


**Motion Revision Quiz**

Name: \_\_\_\_\_

Consider the following motion graphs made by an athlete in training.

**Graph A: Position - Time**



1. State between what time(s), if any, the athlete was stationary.  

**(2 marks)**
2. State at what time(s), if any, the athlete changed direction.  

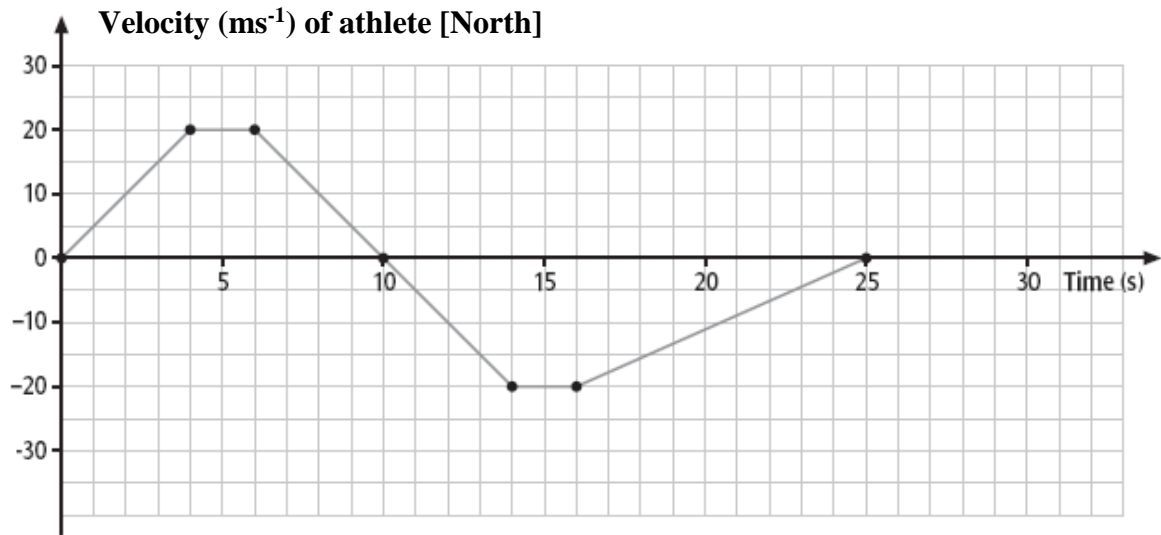
**(2 marks)**
3. Find the average speed of the athlete between the time intervals:  
0-4 sec                      6-14 sec                      16-25 sec  

**(3 marks)**
4. Calculate both the distance and displacement travelled by the athlete over the entire 25 second journey.  

**(3 marks)**
5. Find both the average speed and average velocity of the athlete over the entire 25 second journey.  

**(3 marks)**

**Graph B: Velocity - Time**



6. State between what time(s), if any, the athlete was stationary.

**(2 marks)**

7. State at what time(s), if any, the athlete changed direction.

**(2 marks)**

8. Find the average acceleration of the athlete between the time intervals:

0-4 sec

6-14 sec

16-25 sec

**(3 marks)**

9. Calculate both the distance and displacement travelled by the athlete over the entire 25 second journey.

**(2 marks)**

10. Find both the average speed and average velocity of the athlete over the entire 25 second journey.

**(3 marks)**

Use the following motion description to construct a position - time graph & a velocity – time graph

**Motion description:**

**Stage 1:** The object travels 10 m in a Northerly direction at a constant rate over a time of 10 seconds.

**Stage 2:** The object then remains stationary for a further 10 seconds.

**Stage 3:** The object then travels 20 m in a Southerly direction at a constant rate over a further time of 10 seconds.

