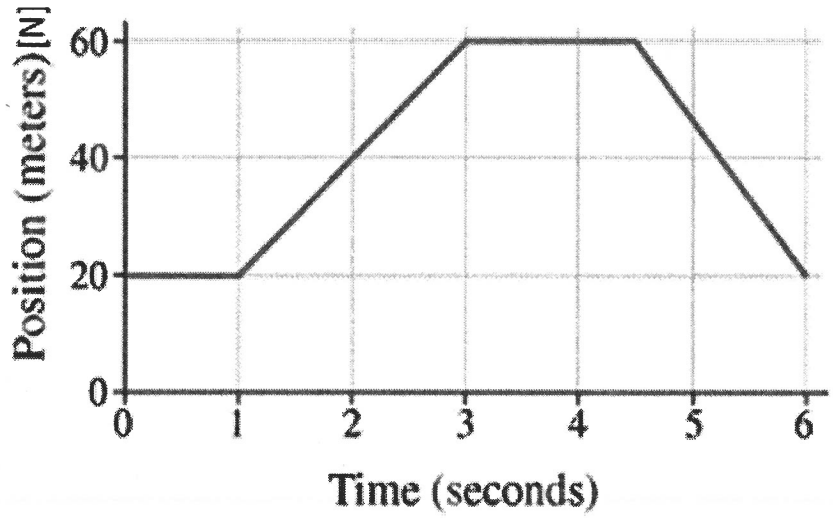
KEY

First Name:_____ Last Name:_____

LO5 – FQ – Interpreting Graphs

Use the following information to answer Q1– Q3:

Fig 1: Greyhound Puppy Running



Q1: What is the magnitude of the velocity of the puppy at t = 2.0 seconds?

*(Record your **three digit** answer in the Numerical Response boxes below)*

2	0	.	0

Slope = $\frac{\text{rise}}{\text{run}}$ $\quad \vec{v} = \frac{\Delta \vec{d}}{\Delta t} = \frac{40\text{m [N]}}{2\text{s}} = 20\text{ m/s [N]}$ (Magnitude)

Q2: What is the displacement of the puppy between 1 and 3 seconds?

Change in y-axis? 40m.

a. 4m [N]
b. 20 m [N]
(c.) 40 m [N]
d. 80 m [N]

Q3: What is the magnitude of the acceleration of the puppy between 4.5 and 6 seconds?

*(Record your **three digit** answer in the Numerical Response boxes below)*

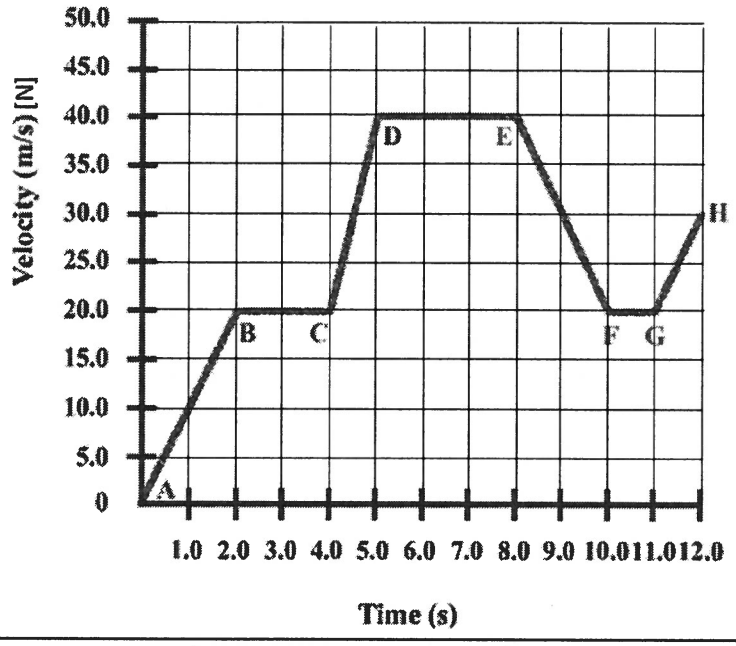
0	.	0	0

Constant slope = constant velocity = No acceleration.

KEY

Use the following information to answer Q4– Q6:

Figure 2: An unidentified flying object (UFO) is travelling erratically in the air.



Q4: What is the acceleration of the UFO between 4 and 5 seconds?

2	0	.	0

Slope = $\frac{\text{rise}}{\text{run}}$ $\quad \vec{a} = \frac{\Delta \vec{v}}{\Delta t} = \frac{20\,m/s\,[N]}{1\,s} = 20\,m/s^2\,[N]$

Q5: *(Short Answer)* During what time periods does the UFO have uniform motion?

Constant velocity?

2-4 sec (BC)
5-8 sec (DE)
10-11 sec (FG)

Q6: *(Short Answer)* What is the displacement of the UFO between 0 and 2 seconds?

Area under graph

Area of $\triangle = \frac{1}{2}bh$
$= \frac{1}{2}(2)(20)$
$\Delta \vec{d} = 20\,m\,[N]$

MARKING:

Beginning	0.0 – 2.5
Progressing	3.0 – 4.0
Competent	4.5 – 5.5
Exemplary	6.0