Velocity & Acceleration Worksheet

Name: _____ Date: _____ Period: __

Calculate the acceleration for the following data. SHOW WORK!

	V_1	V_2	ΔTime	Acceleration
1.	0m/s	24 m/s	3 s	_____
2.	0 m/s	35 m/s	5 s	_____
3.	20 m/s	60 m/s	10 s	_____
4.	50 m/s	150 m/s	5 s	_____
5.	25 m/s	1200 m/s	3600 s	_____

6. A car accelerates from a standstill to 60 m/s in 10 seconds. What is the acceleration?

7. A car accelerates from 25 km/hr to 55 km/hr in 30 seconds. What is its acceleration?

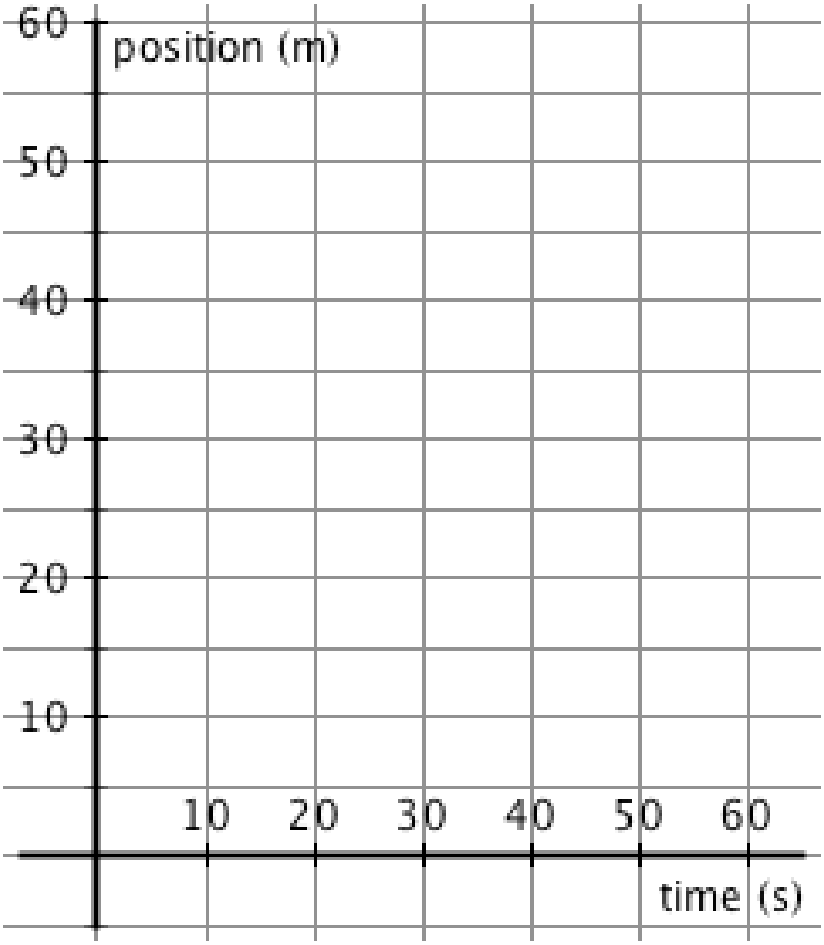
8. A train is accelerating at a rate of 2 m/s^2. If its initial velocity is 20 m/s, what is its velocity after 30 seconds?

9. A runner achieves a velocity of 11.1 m/s, 9 sec after he begins. What is his acceleration? What distance did he cover?

Graphing Distance vs. Time

Plot the following data on the graph and answer the following questions below. SHOW WORK IF APPLIES!

Time (s)	Distance (m)
0	0
10	5
20	12
30	20
40	30
50	42
60	56



1. What is the average speed at 20 s? _____

2. What is the average speed at 30 s? _____

3. What is the acceleration between 20 and 30 s? _____

4. What is the average speed at 40 s? _____

5. What is the average speed at 60 s? _____

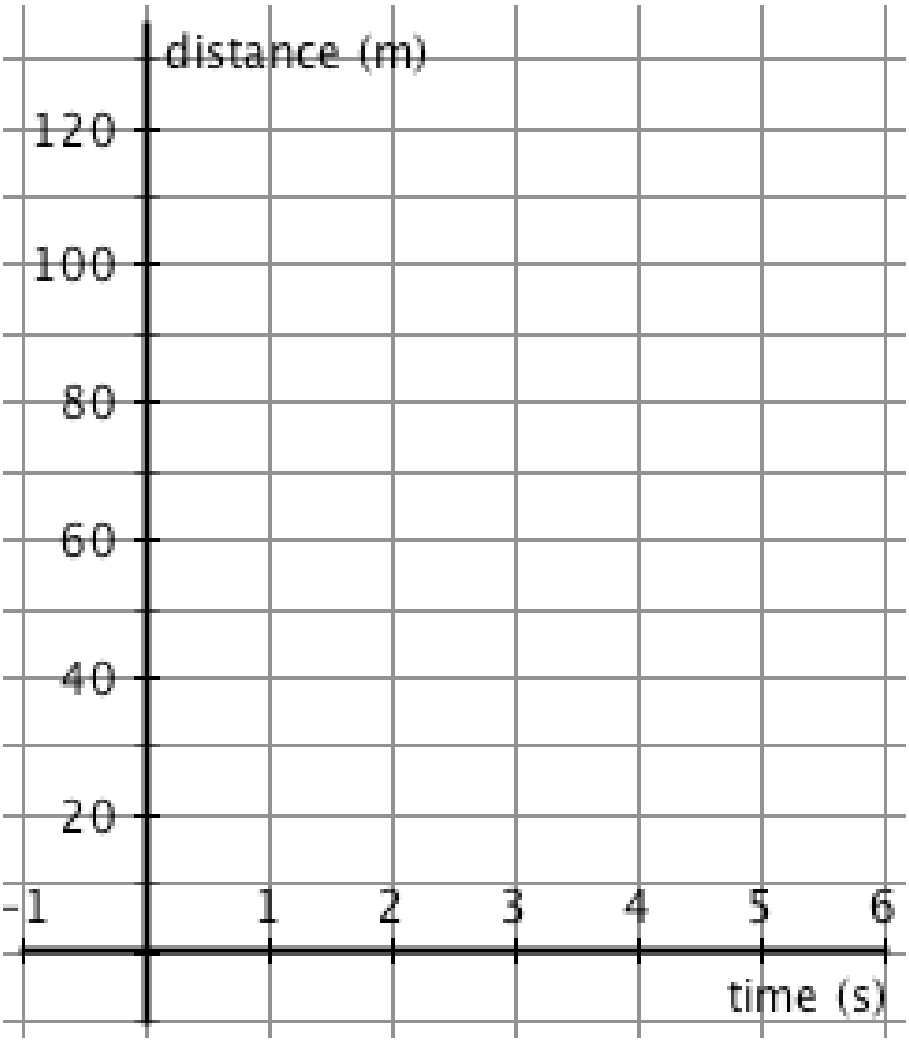
6. What is the acceleration between 40 and 60 s? _____

7. Is the object accelerating at a constant rate? _____

Calculating Average Speed

Graph the following data on the grid below and answer the questions at the bottom of the page.
SHOW WORK!

Time (sec)	Distance (m)
0	0
1	50
2	75
3	90
4	110
5	125



1. What is the average speed after two seconds? _____

2. After three seconds? _____

3. After 5 seconds? _____

4. What is the average speed between two and four seconds? _____

5. What is the average speed between four and five seconds? _____