## Graphs of Motion - Review

1) The graph below represents the position of an object as a function of time.

a) What is the displacement of the object from 6.0 s to 14.0 s ?
b) What is the velocity of the object at 9.0 s?
c) What is the velocity of the object at 18.0 s ?
d) What is the speed of the object at 18.0 s ?
e) What is the displacement of the object from 10.0 s to 16.0 s ?
f) What is the distance covered by the object from 7.0 s to 14.0 s ?
g) What is the average velocity of the object from 3.0 s to 17.0 s ?
h) What is the average speed of the object from 3.0 s to 17.0 s ?
i) During which time interval(s) is the object at rest?
j) What is the average acceleration from 8.0 s to 18.0 s ?
k) Draw a velocity-time graph to represent this situation.
2) The graph below represents the velocity of an object as a function of time.

t (s)
a) What is the velocity of the object at 9.0 s?
b) What is the acceleration of the object at 5.0 s ?
c) What is the acceleration of the object at 14.0 s ?
d) What is the acceleration of the object at 18.0 s ?
e) What is the displacement of the object from 0.0 s to 7.0 s ?
f) What is the distance covered by the object from 7.0 s to 15.0 s ?
g) What is the average velocity of the object from 0.0 s to 15.0 s ?
h) What is the average speed of the object from 0.0 s to 15.0 s ?
i) During which time interval is the object at rest?
j) During which time interval is the object moving at a constant, non-zero velocity?
k) During which time interval(s) is the object slowing down?
I) During which time interval(s) is the object speeding up?
m) Draw an acceleration-time graph for this situation.
n) Draw a position-time graph for this situation.
