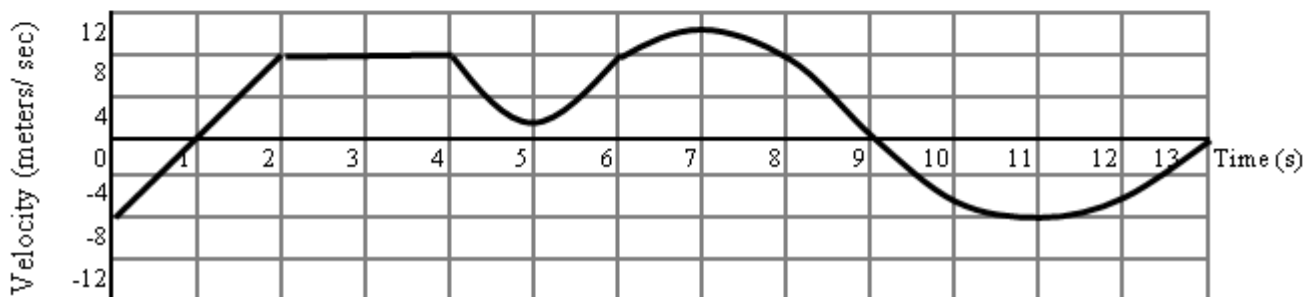
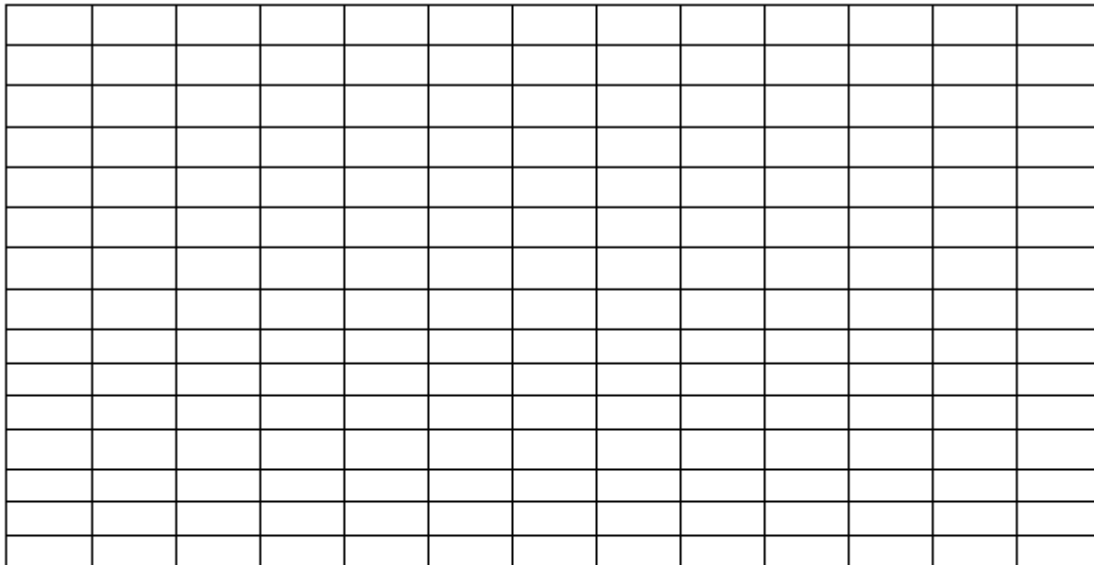


Based on the Velocity-Time Graph below, create a Displacement-Time Graph, including proper axes, below. *You* will have to determine the appropriate scale intervals for the independent and dependent axes.



1. Based on the graph above, at or between what time(s) do the quantities listed below occur? For example, “2 s to 6 s” or “at 5s, 7s, and 9 s.” Be sure to include *all* the times that these occur.

- a. positive velocity
- b. negative velocity
- c. maximum positive velocity
- d. maximum negative velocity
- e. maximum total displacement in the negative direction
- f. maximum total displacement in the positive direction

↓ continue on the back

g. positive acceleration

h. negative acceleration

i. maximum positive acceleration

j. maximum negative acceleration

k. constant velocity

l. constant acceleration

m. zero velocity

n. zero acceleration

2. What is the acceleration between 0 and 2 seconds? *How* did you find it?

3. What is the displacement at the end of 4 seconds? *How* did you find it?

4. a. What distance was covered during the time between 3 and 4 seconds? *How* did you find it?

b. Was the motion forward or backward during this time? *How* do you know?

5. Describe this object's motion during the entire time period, you can use common language like, "it slowed down," or "it made a U-Turn."