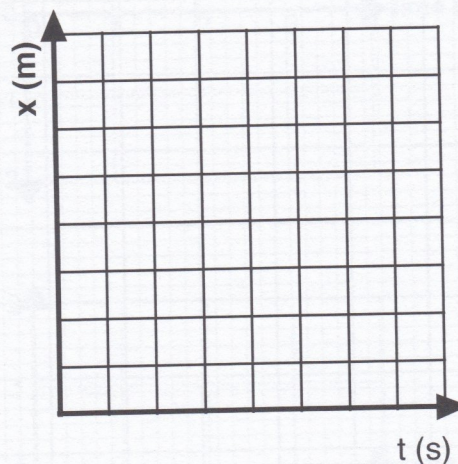# Worksheet 3: Position vs. Time Graphs

1. Robin, rollerskating down a marked sidewalk, was observed at the following positions at the times listed below:

t (s)	x (m)
0.0	10.0
1.0	12.0
2.0	14.0
5.0	20.0
8.0	26.0
10.0	30.0

a. Plot a position vs. time graph for the skater.

b. Explain how you can use the graph to determine how far he was from the origin at t = 6.0s.

c. Write a mathematical expression that describes the skater's motion.

d. Was his speed constant over the entire interval? How do you know?