

Rolling marble (24 pts)

Position vs. time graph - 4 pts

Axes labels and units - 1 pt

Regression curve - 1 pt

6a. Increases, the slope increases - 1 pt

6b. Zero, the marble begins at rest - 1 pt

Graph of x vs. t^2 - 3 pts

Axes labels and units - 1 pt

Regression line - 1 pt

Equation of the line - 1 pt

Functions for velocity and acceleration - 2 pts

Graphs of velocity and acceleration - 2 pts

10. Three graphs if the incline was steeper - 3 pts

11. Three graphs if the marble was pushed up the incline - 3 pts