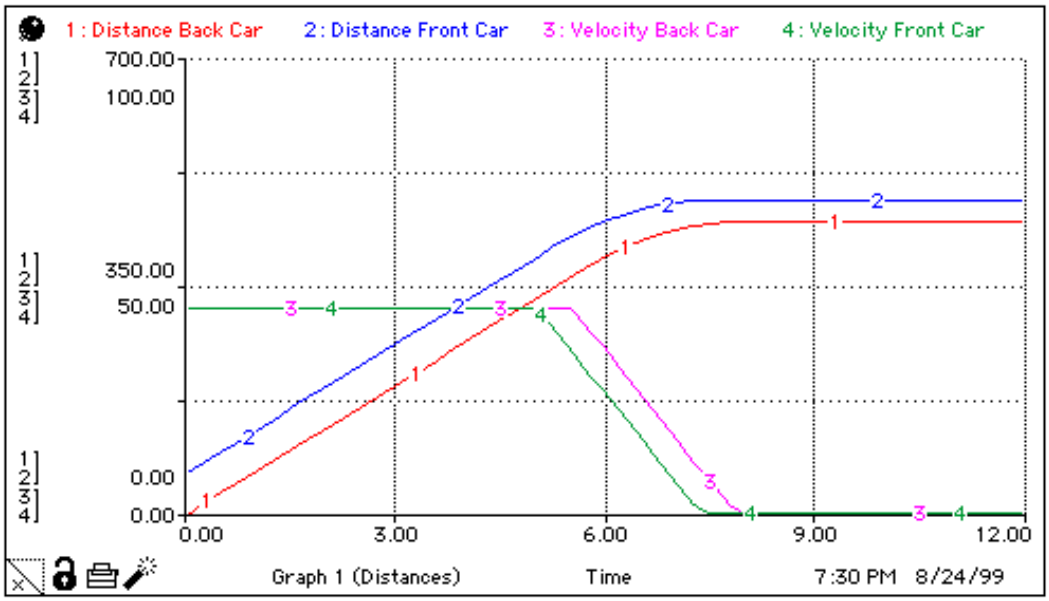
CoreModels Tailgating
Student Assessment

Student Name:_____ Date: _____

Teacher Name:_____ Student Grade (circle one)

9th 10th 11th 12th

1. Explain what the graph below tells us about the motion of two cars. Distance is measured in feet, velocity is measured in mph, and the x-axis is in seconds. Your answer should include a discussion of the motion of each car during the time periods 0-5 seconds, 5-8 seconds and 8-12 seconds.



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2. Computer models are tools for learning about the things they are meant to resemble. A model's usefulness in understanding a real world situation can be determined by examining the assumptions make in constructing the model and by comparing its output to actual observations in the real world.

- Determine the usefulness of the tailgating model by describing at least two similarities between the model and science lab or real world outcomes. Give specific details to support your answer.

- Describe at least one limitation of the tailgating model with respect to its ability to produce results consistent with real world behavior. Why does this limitation exits?

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