Name:

Constructed Response – Group 1 – 10/27/14

Find a word problem below. In order to receive full credit for this assignment, **you must not only show your math work, but you must explain in writing how you solved the problem.**

A toy car moves *x* cm every second for the first 13 seconds. For the next 1/5 minute, the toy car moves *y*  cm every second.

1. Express in terms of *x* and *y*, the total distance, in cm, moved by the toy car during the first 13 seconds and the next 1/5 minute
2. The average speed, *S*, of an object is defined by the formula
   1. Formulate and write down an expression for the average speed of the toy car during the first 13 seconds and the next 1/5 minute in centimeters per second.
   2. Hence, find the average speed of the toy car in centimeters per second if the car moves 20 cm every second for the first 13 seconds and 30 cm every second for the next 1/5 minute.