

Results: Calculus Challenge Problem #9

Again, we had some very nice work on some fairly intense algebraic expressions. None of the groups noticed that the first model $v(t) = \frac{200}{200 \ln(2.5)t + 1}$ can never be zero. This, at best, limits the utility of the model to thin boards. So, according to this model, if you shot a bullet at a redwood, eventually, the bullet would exit the other side.

There was a lot of variety in the data analysis in problem 2 which resulted in models of a variety of forms. You should always graph your result against the data. Some simple sign errors could have been found by doing this in some solutions.

Nice work! As usual, if I can't count, please let me know.

| School | Location | Teacher | Score |
|--------------------------|------------------|------------------|-------|
| Farmington High | Farmington CT | Chris Lepi | 1.5 |
| Hickman High School | Columbia, MO | Deanna Wasman | 3.5 |
| La Habra High School (B) | La Habra, CA | Barbara De Roes | 4.5 |
| Land O'Lakes High School | Land O'Lakes, FL | Patrick Connolly | 4.5 |
| Rockford High School | | Fred Reusch | 4.5 |
| The Westminster Schools | Atlanta, GA | Ellen Vesey | 4 |

Cumulative Summary

| School | Location | Teacher | Score |
|--------------------------|------------------|------------------|-------|
| Brookwood High School | Snellville, GA | Chris Michael | 10 |
| Diamond Bar High School | Diamond Bar, CA | Howard Alcosser | 14 |
| Farmington High | Farmington CT | Chris Lepi | 19.5 |
| La Habra High School (B) | La Habra, CA | Barbara De Roes | 44.5 |
| Hickman High School | Columbia, MO | Deanna Wasman | 25 |
| Land O'Lakes High School | Land O'Lakes, FL | Patrick Connolly | 38 |
| Rockford High School | | Fred Reusch | 42.5 |
| Seaholm High School | Birmingham, MI | Eric Bruns | 12 |
| Walton High School | Marietta, GA | Tom Fulton | 31 |
| The Westminster Schools | Atlanta, GA | Ellen Vesey | 41.5 |