

Name (print neatly): \_\_\_\_\_ Score: \_\_\_\_\_/20

**Quiz 2: Thursday, January 29, 2014**

---

*To receive full credit, show all work necessary to justify answers and all steps of solutions and derivations clearly, in logical sequence, using notation developed in class. Partial credit will be given only for significant progress toward a solution.*

---

1. It is known that  $a(t)$  is of the form  $bt^3 + c$  for some real numbers  $b$  and  $c$ . Suppose \$20 invested at time 0 accumulates to \$24 at time 2.

(a) Find  $b$  and  $c$ . (*Do not round.*)

(b) Find the accumulated value at time 10 of \$500 invested at time 1. (*Round the final answer (only) to the nearest penny.*)