

# MATH 251: Practice 6

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Name: \_\_\_\_\_

Consider the curve  $\vec{r}(t) = \langle t, t^2, \frac{2}{3}t^3 \rangle$ , a modified “twisted cubic.”

- Find the length of the curve between  $t = 0$  and  $t = 2$ .
- Compute the curvature of  $\vec{r}$  at  $t = 1$ .