

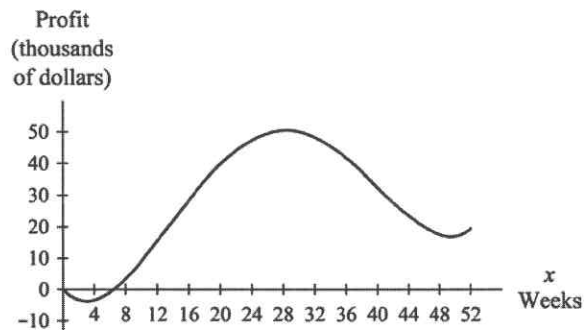
Name: _____

Grade: _____

Group Members Present:

_____, _____, & _____

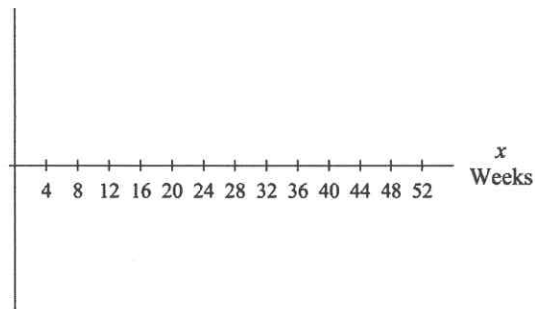
The graph depicts the profit of a business during a one-year period. The equation for this graph is $p(x) = 1.4875x^4 - 0.016x^3 + 0.485x^2 - 2.5x$ thousand dollars after x weeks.



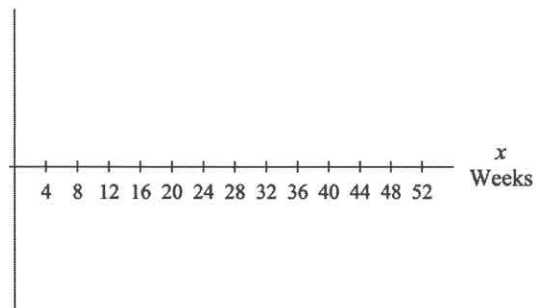
- Draw tangent lines at the inflection points on the graph.
- Estimate the slopes of the tangent lines at the inflection points.

- Sketch the slope graph.
- Write the rate-of-change formula for p .

$$p'(x) =$$



- Draw tangent lines at the extreme points on the slope graph.
- What are the slopes of the tangent lines at the extreme points?



- Write the derivative formula for p' .

$$p''(x) =$$

- Draw vertical lines connecting the inflection points on p with the extrema on p' and the points where p'' crosses the x -axis.