

Section 3.1 Even Answers

2) $-\frac{1}{9}$

4) 3

6) $2x$

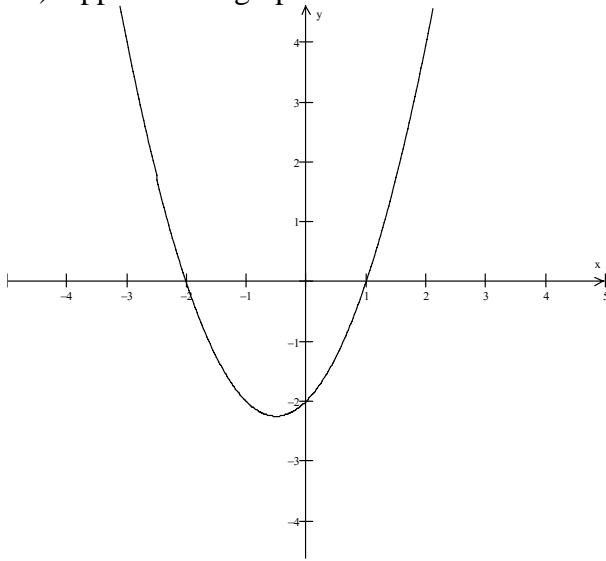
8) The graph of y is always increasing so its derivative is always positive

10) The graph of y is decreasing, increasing, decreasing, increasing so its derivative is negative, positive, negative, positive

12) (a) $y = 3(x - 1) + 1$

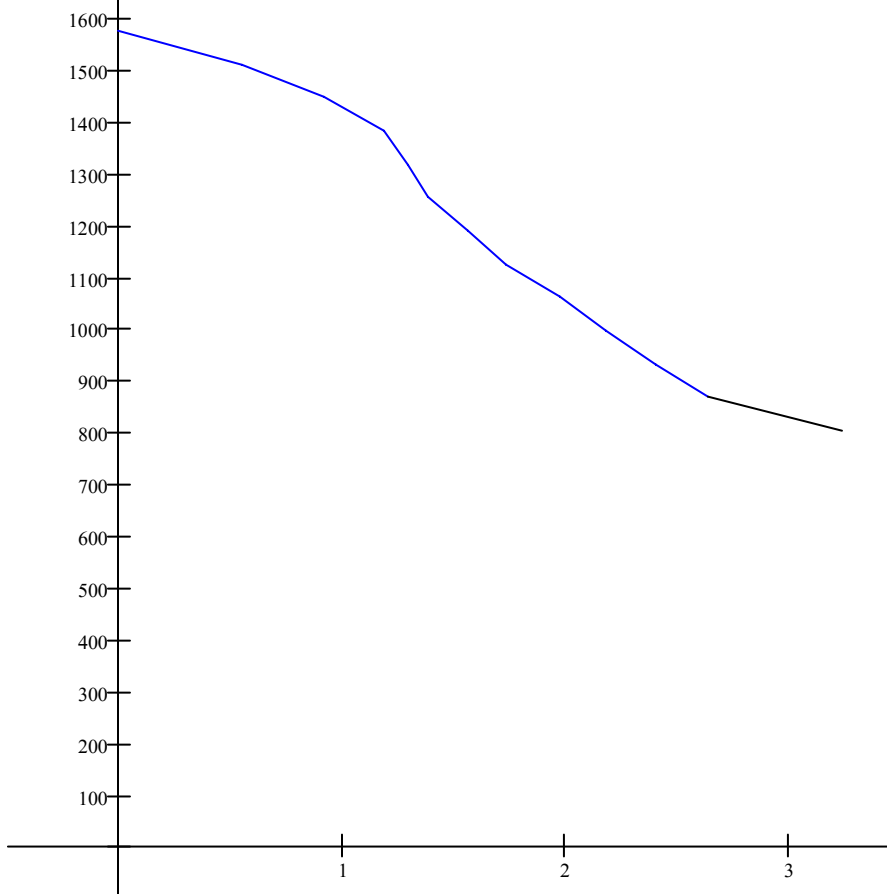
(b) $y = -\frac{1}{3}(x - 1) + 1$

16) Approximate graph of the derivative:

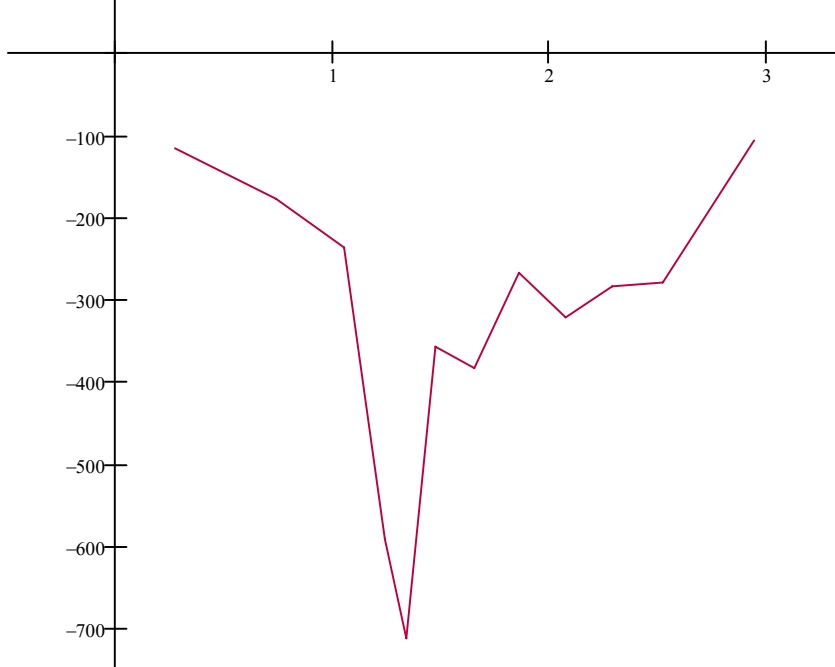


NOTE: #20 and 26 were mistakenly left on the web page version of the assignment sheet after I took them off of the printable version. You are not obligated to do these last two problems but if you did, here are the answers.

20) (a) approximate graph



(b) approximate graph of the derivative



- (c) feet per mile
- (d) feet per mile
- (e) Look for the steepest part of the curve
- (f) Look for the lowest point on the graph

- 26) (a) $2x$
- (b) 2
- (c) 2
- (d) 2