

3.2 Even Answers

2) Not differentiable at the point P (show that $\lim_{x \rightarrow 1} f'(x)$ DNE)

4) Not differentiable at the point P (show that $\lim_{x \rightarrow 1} f'(x)$ DNE)

6) (a) All points in $[-2, 3]$

(b) None

(c) None

8) (a) All points in $[-2, 3]$ except $x = -1, 0, 2$

(b) $x = -1$

(c) $x = 0, 2$

10) (a) All points in $[-3, 3]$ except $x = -2, 2$

(b) $x = -2, 2$

(c) None

12) The problem is a cusp and therefore not differentiable

18) Differentiable everywhere except at $x = 2$ because of a vertical tangent line