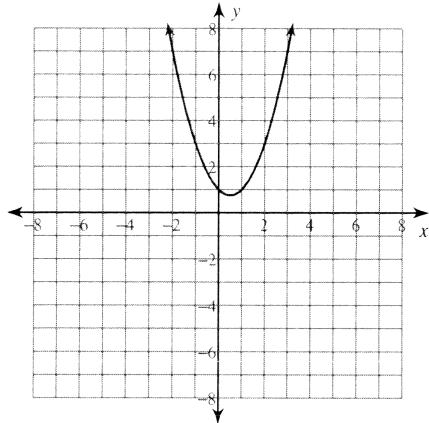


Average Rates of Change

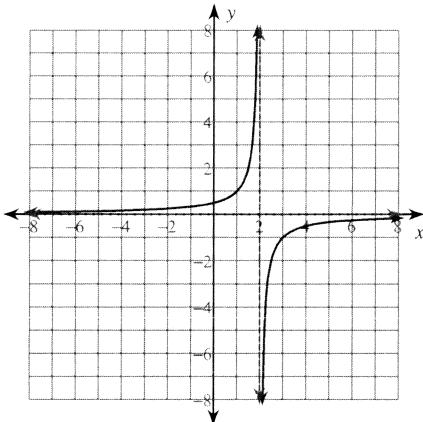
For each problem, find the average rate of change of the function over the given interval.

1) $y = x^2 - x + 1; [0, 3]$



2

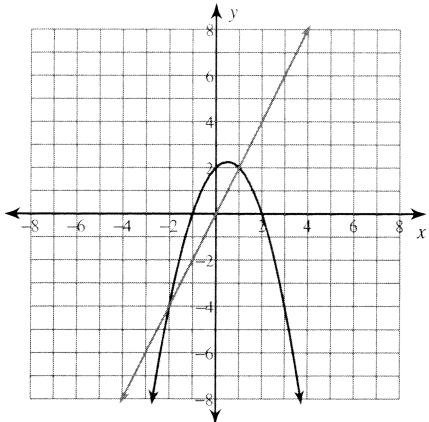
2) $y = -\frac{1}{x-2}; [-3, -2]$



$$\frac{1}{20}$$

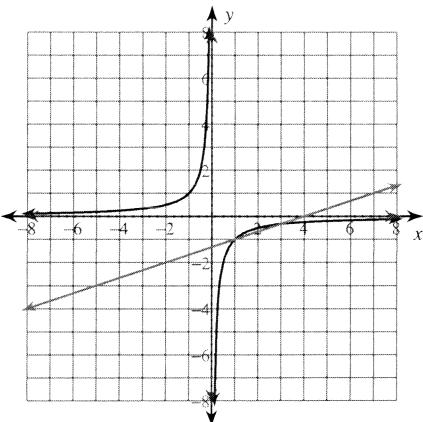
For each problem, find the equation of the secant line that intersects the given points on the function.

3) $y = -x^2 + x + 2; (-2, -4), (1, 2)$



$y = 2x$

4) $y = -\frac{1}{x}; (1, -1), \left(3, -\frac{1}{3}\right)$



$$y = \frac{1}{3}x - \frac{4}{3}$$