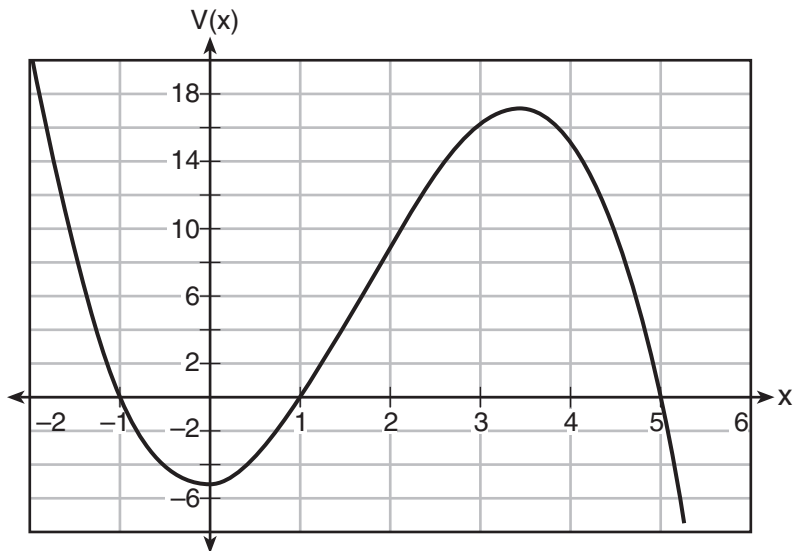


A cardboard box manufacturing company is building boxes with length represented by  $x + 1$ , width by  $5 - x$ , and height by  $x - 1$ . The volume of the box is modeled by the function below.



Over which interval is the volume of the box changing at the fastest average rate?

(1)  $[1, 2]$

(3)  $[1, 5]$

(2)  $[1, 3.5]$

(4)  $[0, 3.5]$