Possible Solutions

Using the coordinate plane shown below, find the rate of change represented.

Solution 1

\[
\begin{align*}
-8 & \quad 10 \\
\frac{-8}{10} & = \frac{-4}{5}
\end{align*}
\]

The rate of change is \(\frac{-4}{5}\).

Solution 2

The family drove 6 hours each day.
On day 1, they drove 6 hours.
On day 2, they drove 6 more hours for a total of 12 hours.
On day 3, they drove 6 more hours for a total of 18 hours.

Make a table.

<table>
<thead>
<tr>
<th>Days (x)</th>
<th>Hours (y)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>12</td>
</tr>
<tr>
<td>3</td>
<td>18</td>
</tr>
</tbody>
</table>

The table demonstrates that the family drove at a constant rate of change of 6 hours in one day.