Graph each of the following and then solve the puzzle. Show all work on a separate sheet of paper.
State the rate of change for each graph and then solve the puzzle.

What Does It Take to Win a Tug of War?

Find the rate of change represented by each line (some answers are rounded). Cross out the letters above each correct answer. Write the remaining letters in the spaces at the bottom of the page.

Distance Traveled

Distance from Home

Water Flow

Rate of change: 

Rate of change: 

Flow rate (A): 

Flow rate (B): 

Calorie Counts

Plant Growth

Candle Height

butter: 

cream cheese: 

plant A: 

plant B: 

12” candle: 

8” candle: 

Phone Cost

Poster Printing

Night Temperatures

Rate for talk time

Rate for printer A:

Rate for printer B:

Rate for first 4 h:

Rate for next 8 h:

<table>
<thead>
<tr>
<th>TH</th>
<th>GR</th>
<th>AB</th>
<th>E</th>
<th>ST</th>
<th>UN</th>
<th>EA</th>
<th>CH</th>
</tr>
</thead>
<tbody>
<tr>
<td>25 cal/oz</td>
<td>-10°F/h</td>
<td>4°F/h</td>
<td>$0.33/poster</td>
<td>20 gal/min</td>
<td>$0.45/min</td>
<td>0.5 in/.wk</td>
<td>40 cal/oz</td>
</tr>
<tr>
<td>S</td>
<td>OF</td>
<td>LO</td>
<td>BI</td>
<td>TU</td>
<td>G</td>
<td>ET</td>
<td>OO</td>
</tr>
<tr>
<td>40 mi/h</td>
<td>-62 mi/h</td>
<td>-2.4 in./h</td>
<td>0.8 in/.wk</td>
<td>2.5°F/h</td>
<td>35 mi/h</td>
<td>$0.35/min</td>
<td>-50 mi/h</td>
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<tr>
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<td>AM</td>
<td>IK</td>
<td>ER</td>
<td>PU</td>
<td>LL</td>
<td>KS</td>
<td>E</td>
</tr>
<tr>
<td>-1.5 in./h</td>
<td>$0.50/poster</td>
<td>50 cal/oz</td>
<td>15 gal/min</td>
<td>1 in/.wk</td>
<td>-1.33 in./h</td>
<td>$0.40/poster</td>
<td>13.3 gal/min</td>
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</tbody>
</table>

Linear Equations and Their Graphs:
Rate of Change

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