SOLUTIONS - PROB. #3

Review, Chap 1

(b) Linear - only \( h(x) = -3x + 3 \)

(b) Exponential - only \( g(x) = 36 \cdot \left(\frac{3}{2}\right)^x \)

(use ratio, differences for exponential, linear)

#9

\[ 1500 = 3 \text{ feet in 2 hours} \rightarrow \text{six hours at 3 feet per hour} \]

\[ \text{Ans: } 500 \times 3 \times 3 \times 3 = 13500 \]

In 6 hours, 500x(3)

Section 2.1

#4 Positive at A, D; negative at C, F

Most positive: A, most negative: F

#5

<table>
<thead>
<tr>
<th>Slope</th>
<th>Point</th>
</tr>
</thead>
<tbody>
<tr>
<td>-3</td>
<td>F</td>
</tr>
<tr>
<td>-1</td>
<td>C</td>
</tr>
<tr>
<td>0</td>
<td>E</td>
</tr>
<tr>
<td>1/2</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
</tr>
<tr>
<td>2</td>
<td>D</td>
</tr>
</tbody>
</table>

#6

All slope positive; slope of \( y = x \) is 1 so we get:

\[ 0 < \text{slope at C} < \text{slope at B} \]

\[ < \text{slope of AB} < 1 \]

\[ \Rightarrow \text{slope at A} \]