La terza legge di Keplero mediante regressione lineare in scala logaritmica

<table>
<thead>
<tr>
<th>Pianeta</th>
<th>Distanza media dal sole</th>
<th>Periodo di rivoluzione</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mercurio</td>
<td>36</td>
<td>88</td>
</tr>
<tr>
<td>Venere</td>
<td>67,25</td>
<td>224,7</td>
</tr>
<tr>
<td>Terra</td>
<td>93</td>
<td>365,3</td>
</tr>
<tr>
<td>Marte</td>
<td>141,75</td>
<td>687</td>
</tr>
<tr>
<td>Giove</td>
<td>483,8</td>
<td>4332,1</td>
</tr>
</tbody>
</table>

In scala logaritmica

<table>
<thead>
<tr>
<th>Pianeta</th>
<th>Log (distanza)</th>
<th>Log (periodo)</th>
<th>Periodo = 10(^{(1,4996 \times \text{Log (distanza)} - 0,3894)})</th>
<th>Periodo(^2 = 0,166 \times \text{distanza}(^3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mercurio</td>
<td>1,556302501</td>
<td>1,944482672</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Venere</td>
<td>1,827692289</td>
<td>2,351603072</td>
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</tr>
<tr>
<td>Terra</td>
<td>1,968482949</td>
<td>2,562649672</td>
<td></td>
<td>0,407943</td>
</tr>
<tr>
<td>Marte</td>
<td>2,151523068</td>
<td>2,836956737</td>
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<td>0,166418</td>
</tr>
<tr>
<td>Giove</td>
<td>2,68465864</td>
<td>3,636698473</td>
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</tr>
</tbody>
</table>

La legge si esprime come:

\[
y = 1,4996x - 0,3894
\]