Prediction Intervals

Registered Florida Pleasure Craft (in tens of thousands) and Watercraft Related Manatee Deaths

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<tbody>
<tr>
<td>Boats</td>
<td>68</td>
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<td>Manatee Deaths</td>
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<td>35</td>
<td>49</td>
<td>42</td>
<td>60</td>
<td>54</td>
<td>67</td>
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Find the best point estimate for the number of manatee deaths for 750,000 (75) registered pleasure craft. Construct a 95% prediction interval estimate for the number of manatee deaths for 750,000 (75) registered pleasure craft.

Enter your data into L1 and L2 on your TI-83/84.

Test for significant linear correlation.
Note: \( r \approx 0.922, \ P\-Value \approx 0.0002 \)
Conclusion: Significant Positive Linear Correlation

Calculate best point estimate:
\[ \hat{y} = 58 \text{ manatees} \]

95% P.I. \( \approx (42, 74) \)

Enter your x

T Critical Value from Table A-3 OR Program INVT

Add parens, x val & enter