

INSTRUCTIONS FOR COST REDUCTION SLIDE RULE

Model LC-6

To compute values on learning curves between the scales on the Model LC-6 Neal Feay Cost Reduction Slide Rule, follow these instructions:

Given: First Unit Cost 40 Hours
 (Use Unit Cost Side)
 Learning Curve 87%

Find: Cost of 50th Individual Unit

Operation: Use Unit Cost Side of Slide Rule

1. Find cost on 90% scale,
 50th unit 22.2 Hours
2. Find cost of 85% scale,
 50th unit 16.2 Hours
3. Subtract, (difference) 6.0 Hours
4. 40% (2/5th) of difference,
 6.0 x 40% 2.4 Hours
5. Add 2.4 to 16.2 18.6 Hours

Answer: 18.6 hours is the approximate cost of 50th individual unit on the 87% learning curve of NF Model LC-6 Slide Rule.



The cost reduction slide rule was designed as a tool for quickly extrapolating cost estimates from a given set of data. Although its primary use will be for calculating direct fabrication hours, it can also be used for shop loading, material pricing and sales price extrapolation. For instruction purposes the following examples are given in terms of fabrication direct hours.



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*90% curve - 10% 86
price every time you double
the quantity.*

UNIT COST EXAMPLES

(Use Unit Cost Side of Slide Rule)

1. Given: First Unit Cost 700 Hours
 Learning Curve 85%

Find: Cost of 50th Individual Unit

Operation: Set 700 hours on the C scale opposite the index on the D scale. Move cursor to 50 on the 85% scale. Read 280 under the cursor on the C scale as the cost/hours of the 50th individual unit.

2. Given: 1000th Unit Cost 50 Hours
 Learning Curve 80%

Find: First Unit Cost

Operation: Set cursor at 1000 on the 80% scale. Set 50 hours on the C scale under the cursor line. Read 462 first unit cost/hours on the C scale opposite the left hand index of the D scale.

Note that the unit scale for the 75%, 70%, and 65% cost reduction curve is a folded scale.

MULTIPLY AND DIVIDE

The C and D scale may be used as a conventional slide rule for multiplying and dividing.



AVERAGE COST EXAMPLES

(Use Average Cost Side of Slide Rule)

1. Given: First Unit Cost 900 Hours
 Quantity 200 Units
 Learning Curve 80%

Find: Average Cost

Operation: Set 900 on the C scale opposite the index on the D scale. Move cursor to 200 on the 80% scale. Read 238 average cost/hours under the cursor on the C scale.

2. Given: Quantity 20 Units
 Average Cost 60 Hours
 Learning Curve 90%

Find: First Unit Cost

Operation: Set cursor at 20 on the 90% scale. Set 60 hours on the C scale under the cursor index line. Read 82 first unit cost/hours on the C scale at the index on the D scale.

Note that the average scale for 75%, 70%, 65% cost reduction curve is a folded scale.

From the desk of—

L. A. DARLING

unit cost at 500 level is
\$ 176 what is ~~cost~~ unit cost
at 10,000 level.

Move cursor to 500 on 90%
square under the 500 position 176
on C scale. Then move cursor to
1000 on 90% scale and read 157
on C scale. Now move cursor to
10 on 90% scale, set 157 on C
scale over the index on D scale and
read 110 under cursor. This is
price each at 10,000 level.