

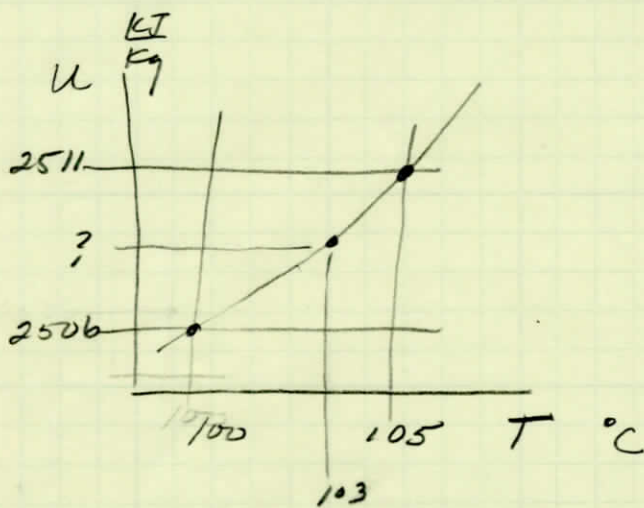
Interpolation

↳ A common manipulation for Engineers

To determine a value that falls between entries in a table (any table) we interpolate.

Linear interpolation is the most common.

There are other interpolation techniques



| T | u |
|-----|------|
| 100 | 2506 |
| 103 | ? |
| 105 | 2512 |

$$u = \frac{2512 - 2506}{105 - 100} (103 - 100) + 2506$$

$$= 2509.6 \approx 2510$$

In general

| | |
|---|---|
| A | C |
| X | Y |
| B | D |

$$Y = \left[\frac{D - C}{B - A} \right] (X - A) + C$$

$$\left[\overset{HP50j}{D} C - B A \div X A - * C + \right]$$