

Formula for calculating customs duty, followed by notes on the measurements of Herod's temple and a series of trigonometrical calculations.

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Question

To find the net duty upon East-India goods by 12 Ann {C}

Answer

Let D be the duty per cent upon 100^{li} by former Acts of Parliament & say, As the value, $100^{\text{li}} + D$ to the net duty D so is 1 to N . And the number N being once found the Question will be thus answered. From the value by the candle subduct the allowances for prompt payment & warehouse room & the remainder multiplied by N will be the net duty desired

Proof

For let the Remainder by R & NR will be the duty per cent upon $R - NR$, the remainder of that duty{.} For as the value $100^{\text{li}} + D$ is to the net duty D , so is 1 to N , & so is the value R to the net duty NR the remainder R is the value upon which the net duty is to be paid & this value is to the net duty upon it in a given proportion & this proportion is that of $100^{\text{li}} + D$ to D or 1 to N .

The Jews who first published the measures of Herods Temple, omitted some measures on either side of the altar & the summ of the cubits & the following Jewish writers dividing the summ of the cubits omitted into two equal parts placed the altar nearer to the south side of the court then to the north side: whereas they should have divided that summ unequally so that the altar might have stood in the center of the court.

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in $2\frac{1}{4}$ it runs $13_{\perp} 8 \times 13_{\perp} 8 \times 4$ dig = 76176 dig. In 1' it runs $338_{\perp} 56$ dig.

In $24''$ it falls 32 dig & moves 64^{dig}

In 1" it moves 160 dig

In **{illeg}** it moves 9600 dig.

In $135'' = 2\frac{1}{4}$ it runs $16_{\perp}12 \times 16_{\perp}12 \times 4 \times 13_{\perp}8$ dig in length = 14344 dig.

In 1' it moves $6375_{\perp}09461$
