

Aliquot Parts

This heading refers to short cuts for multiplying or dividing by even parts of 10, 100 or 1000 as $3\frac{1}{2}$, $16\frac{2}{3}$ or 125.

Rule 30 - To Multiply by $2\frac{1}{2}$ ($\frac{1}{2}$ of 1) divide by 4 and consider result as tens.

Ex. $24 \times 2\frac{1}{2} = 24 \div 4 = 6 \text{ tens} = 60$

Rule 31 - To Multiply by 25 ($\frac{1}{4}$ of 100) divide by 4 and consider result as hundreds.

Ex. $254 \times 25 = 254 \div 4 = 63\frac{1}{2} \text{ hundreds} = 6350$

Rule 32 - To Multiply by 250 ($\frac{1}{4}$ of 1000) divide by 4 and consider the result as thousands.

Ex. $512 \times 250 = 512 \div 4 = 128 \text{ tho. ands} = 128000$

Rule 33 - To Multiply by 125 ($\frac{1}{8}$ of 1000) or ($\frac{1}{8}$ of 1000) to the number add $\frac{1}{2}$ of the number and consider the ans. as 100's; or divide the number by 8 and consider the answer as 100's.

Ex. $64 \times 125 = 64 + \frac{1}{2} \text{ of } 64 = 80 \text{ hundreds} = 8000$

or $64 \times 125 = 64 \div 8 = 8 \text{ thousands} = 8000$

or $252 \times 125 = 252 \div 8 = 31\frac{1}{2} = 31500$

Note To Divide by Aliquot Parts do the exact opposite to that done when multiplying by the same aliquot part.

Ex. $4250 \div 25 = 4250 \times 4 \text{ and } \div 100 = 170.00$

See Rule 2 for dividing by 100

Ex. $1592 \div 250$ Multiply 1592 by 4 and mark off 3 places; $1592 \times 4 = 6368$

12	18	13	16	14	19	16	15	18	11	18	16	14
<u>4</u>	<u>5</u>	<u>9</u>	<u>6</u>	<u>8</u>	<u>3</u>	<u>7</u>	<u>5</u>	<u>9</u>	<u>8</u>	<u>6</u>	<u>3</u>	<u>6</u>