two points H and H' are to be found on the side $A\,B$. Let the distance $A\,H = x$, and the distance $A\,H' = x'$.

$$x = \frac{c\,a}{3\,d} \qquad \text{N. S.}$$

$$= \frac{c \times \frac{1}{3}\,a}{d} \qquad \text{G. S.}$$

$$x' = \frac{2\,c\,a}{3\,d} \qquad \text{N. S.}$$

$$= \frac{c \times \frac{2}{3}\,a}{d} \qquad \text{G. S.}$$

PROBLEM LII.

To divide the same triangle (see Problem L.) into two equivalent parts by a line parallel to the base. It is evident that the problem is solved as soon as one point D is found on one side $A\,C$, through which the dividing line is to pass.

Let the distance $A\,D = x$; then

$$x = \sqrt{\frac{c^2}{2}} \qquad \text{N. S.}$$

$$= \sqrt{c \times \frac{c}{2}} \qquad \text{G. S.}$$

PROBLEM LIII.

To divide the same triangle (see Problem L.) into five equivalent parts by lines parallel to the base.

Then 4 points D, D', D'', D''' are to be found on the same side $A\,C$.

Let $A\,D = x$; $A\,D' = x'$; $A\,D'' = x''$; $A\,D''' = x'''$.

N. S.		G. S.
$x = \sqrt{\frac{a^2}{5}}$	=	$\sqrt{a \times \frac{a}{5}}$
$x' = \sqrt{\frac{2\,a^2}{5}}$	=	$\sqrt{a \times \frac{2\,a}{5}}$
$x'' = \sqrt{\frac{3\,a^2}{5}}$	=	$\sqrt{a \times \frac{3\,a}{5}}$
$x''' = \sqrt{\frac{4\,a^2}{5}}$	=	$\sqrt{a \times \frac{4\,a}{5}}$