Ex. 4. Let $x = \sqrt{\frac{3\ a^2}{5}}$

then $x = \sqrt{a \times \frac{3\ a}{5}}$ (3rd formula).

It is evident that in this last case, the line a should be divided into five equal parts, and a mean proportional drawn between the whole line and three of the equal parts.

Ex. 5. Let $x = \sqrt{\frac{a\ b\ c}{e}}$

then $x = \sqrt{\frac{a\ b}{e} \times c}$ by decomposing.

making $\frac{a\ b}{e} = y$ (by formula 2nd).

then $x = \sqrt{y\ c}$ (3rd formula).

Ex. 6. Let $x = \sqrt{a^2 + b^2 + c^2 + d^2}$

Let an hypotenuse y be drawn on a and b, and substituted in the expression, then

$$x = \sqrt{y^2 + c^2 + d^2}$$

making $y^2 + c^2 = z^2$, in the same way, then

$$x = \sqrt{z^2 + d^2}$$ (4th formula).