

∴ $V_{efac} = ?$

V_m $\langle X \rangle = 0$
 $X_{ef} = \underline{A}$

$$X_{ef} = \sqrt{\frac{1}{T} \int_0^T x^2(t) dt}$$

$$= \sqrt{\frac{1}{6} \int_0^6 A^2 dt} = \sqrt{\frac{1}{6} \cdot A^2 \cdot 6}$$

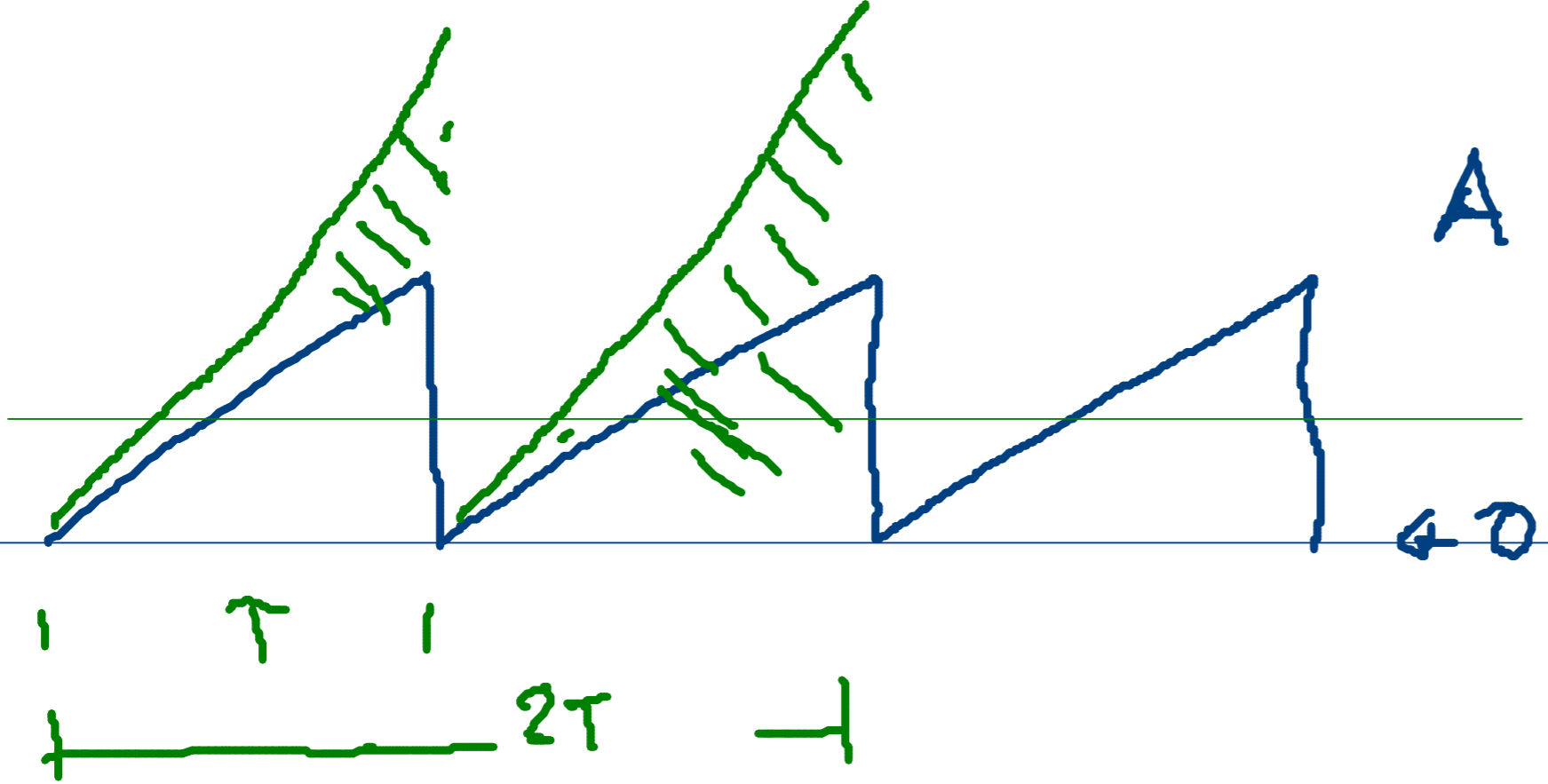
$$X_{ef} = \sqrt{\frac{1}{\cancel{6}} A^2 \cdot \cancel{6}} = A$$

$$X_{efac}^2 + X_m^2 = V_{ef}^2$$

$$X_{efac} = \sqrt{V_{ef}^2 - V_m^2} = A$$

$\sqrt{A^2 - 0}$

x

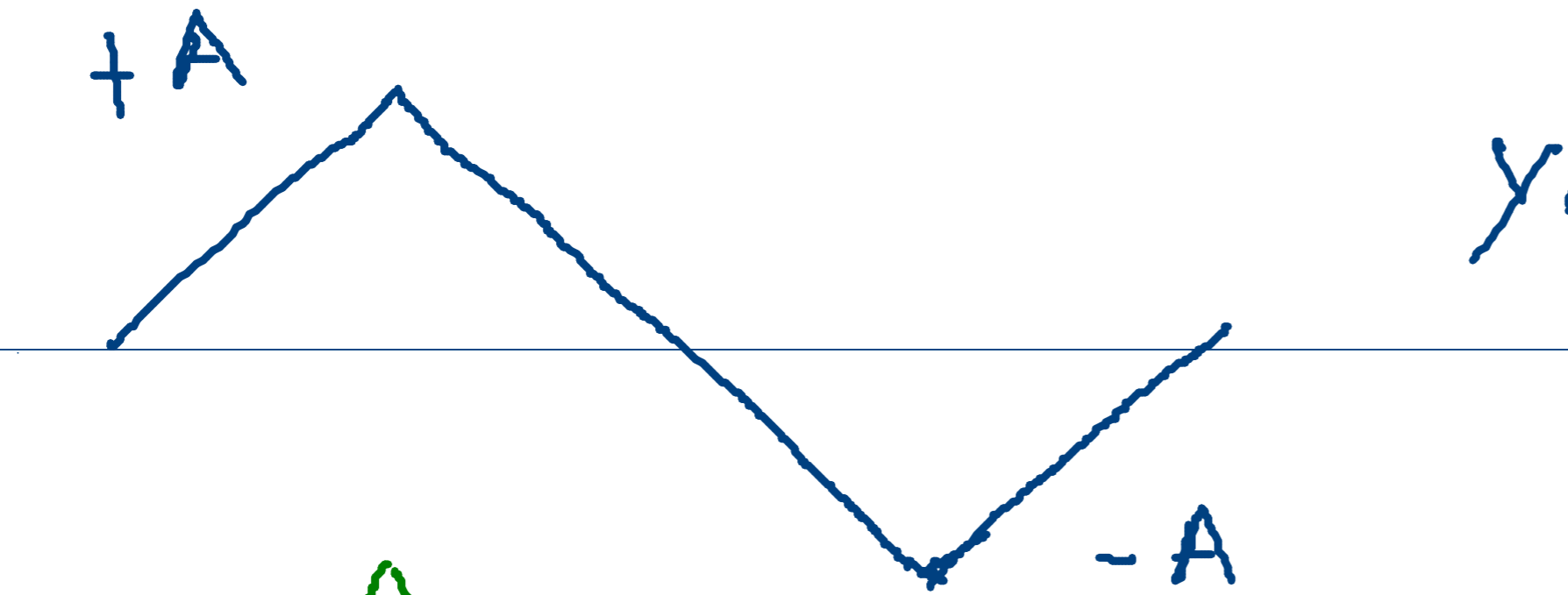


$$x_{avg} = \frac{A}{\sqrt{3}}$$

↑
~~area~~

$$x_{avg_{oc}} = \frac{A}{\sqrt{2}}$$

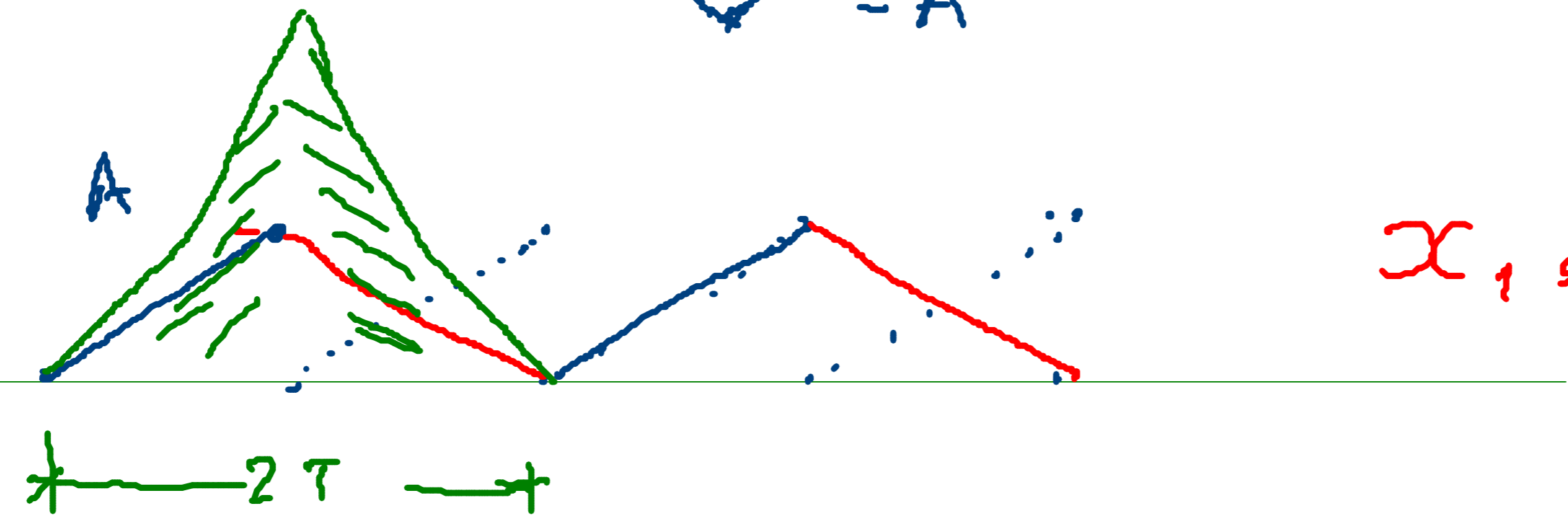
y



$$y_{avg} = \frac{A}{\sqrt{3}}$$

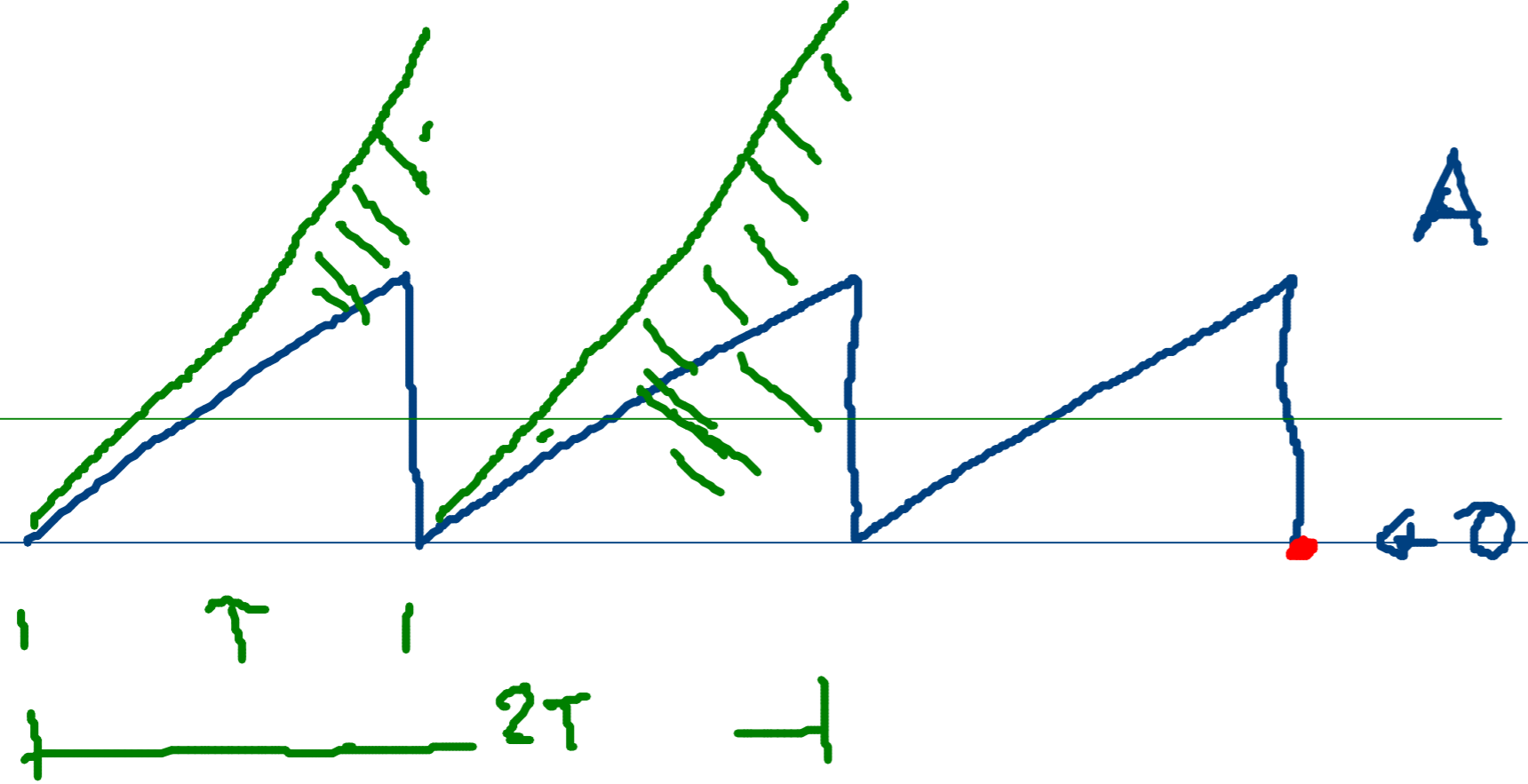
$$y_{avg_{oc}} = \frac{A}{\sqrt{3}}$$

x₁



$$x_{1, avg} =$$

x

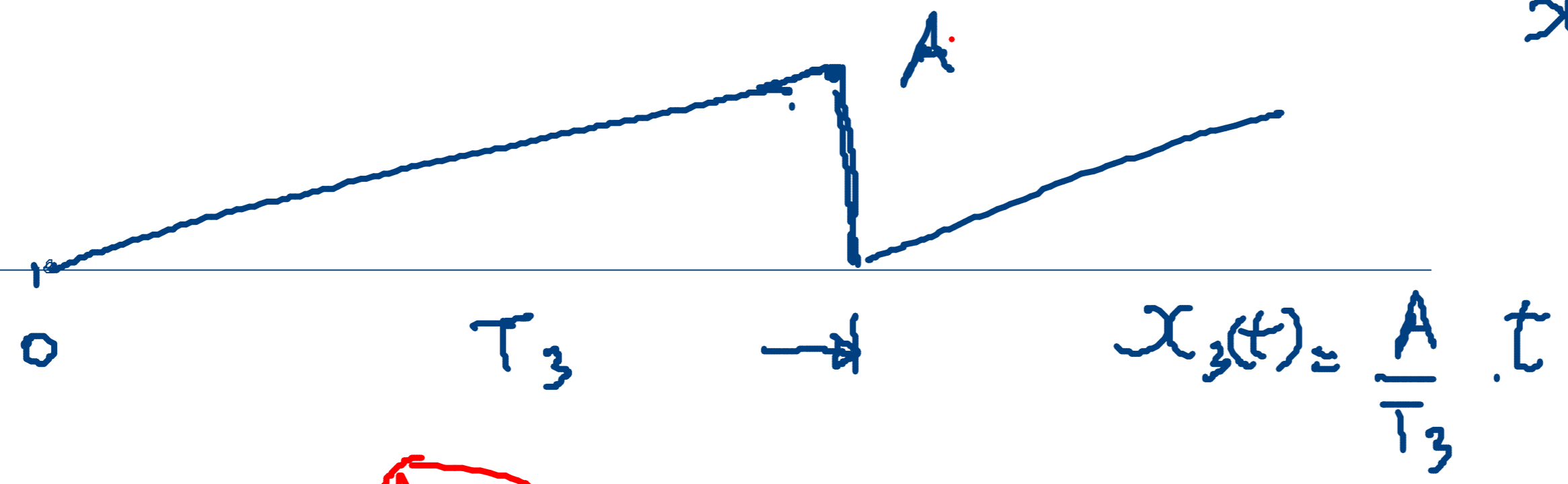


$$x_{avg} = \frac{A}{\sqrt{3}} \quad x_{avg\ ac} = \frac{A}{\sqrt{12}}$$

~~$x_{rms} = \frac{A}{\sqrt{3}}$~~
 $x_{avg\ ac}$

$$\langle x \rangle = \frac{A}{2}$$

x_3

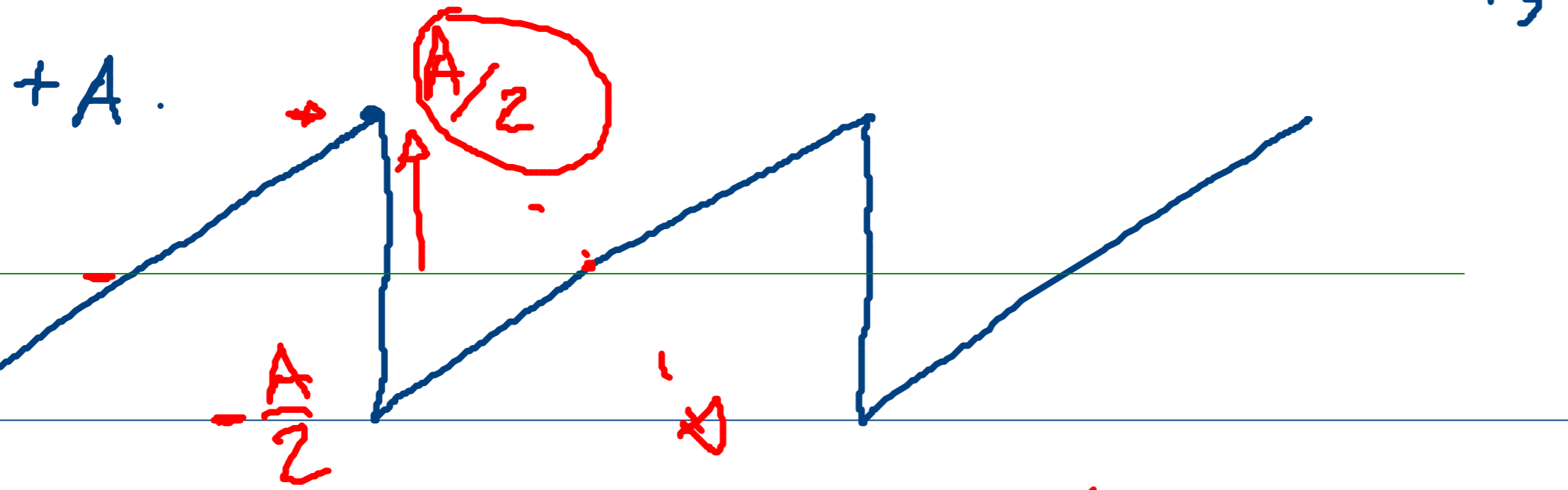
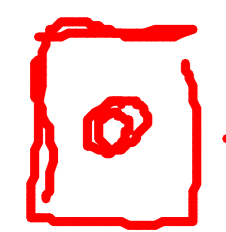


$$x_{3\ avg} = \sqrt{\frac{1}{T_3} \int_0^{T_3} x_3^2(t) dt}$$

$$\sqrt{\int_0^{T_3} \frac{A^2}{T_3^2} t^2 dt}$$

$$x_{3\ avg}^2 = \frac{1}{T_3} \frac{A^2}{T_3^2} \frac{t^3}{3} \Big|_0^{T_3}$$

$$= \frac{1}{T_3} A^2 \cdot \frac{1}{3} T_3^3$$



$$V_{avg\ ac} = \frac{A/2}{\sqrt{3}} = \frac{A}{2\sqrt{3}} = \frac{A}{\sqrt{12}}$$

