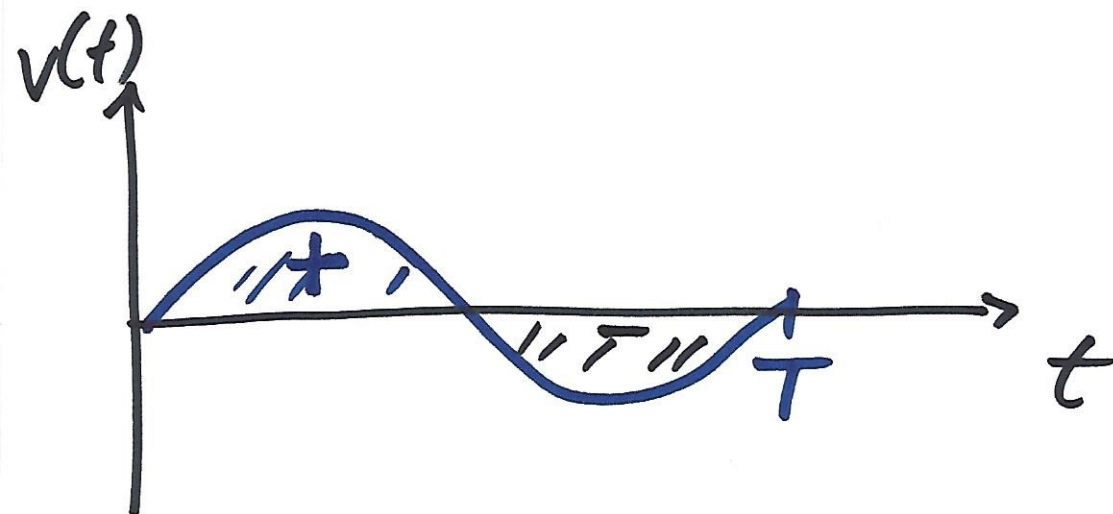
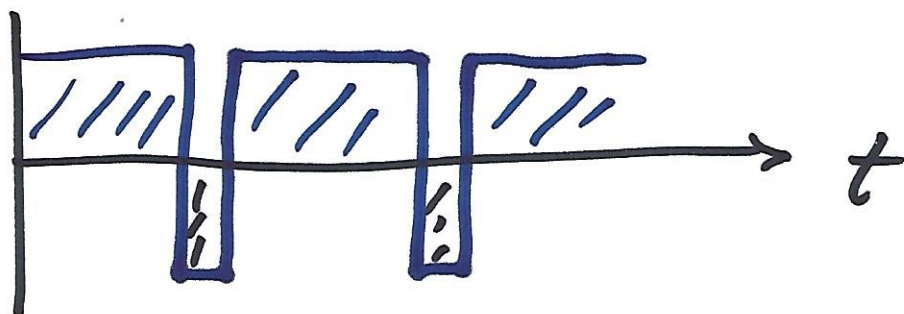


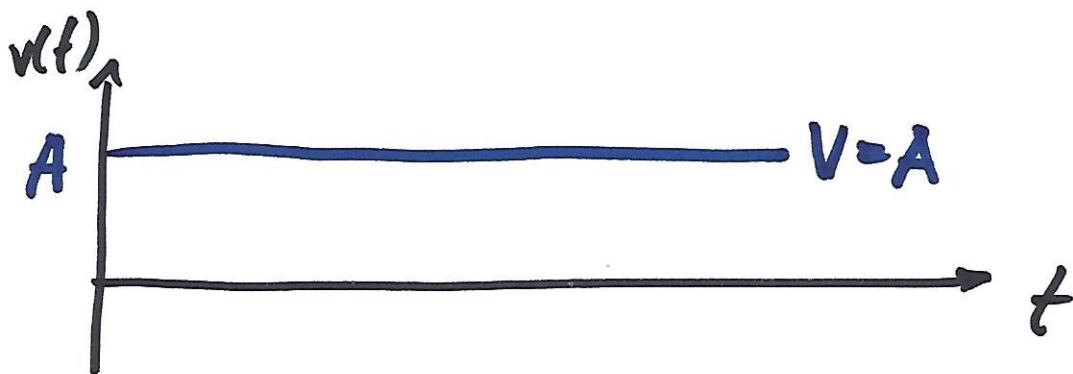
Μέση τιμή



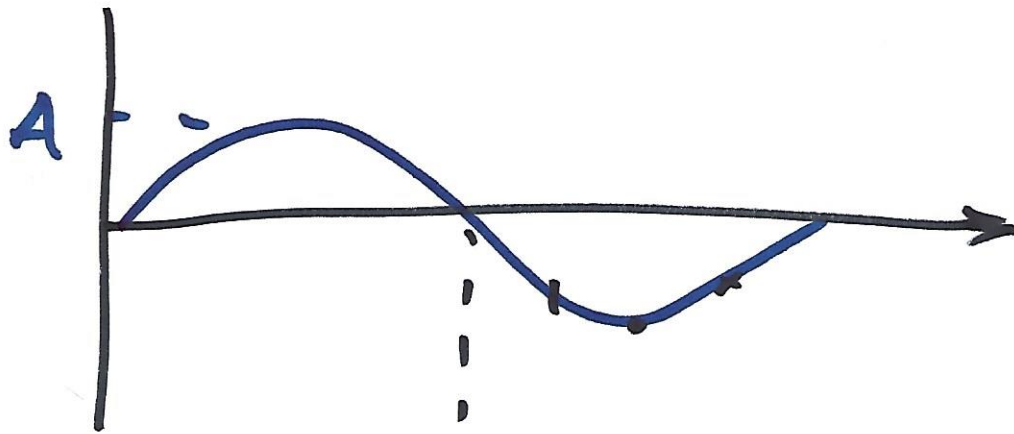
$$\bar{V} = 0$$



$$\bar{V} > 0$$



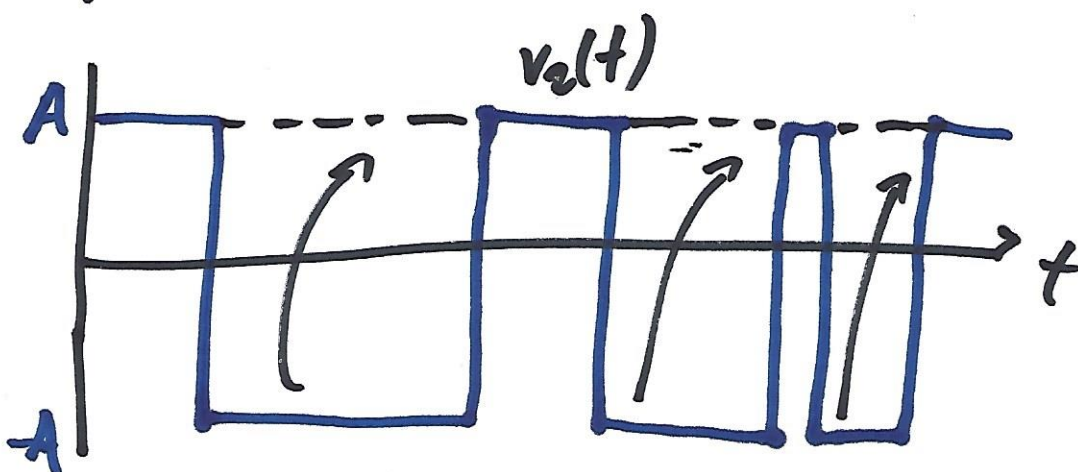
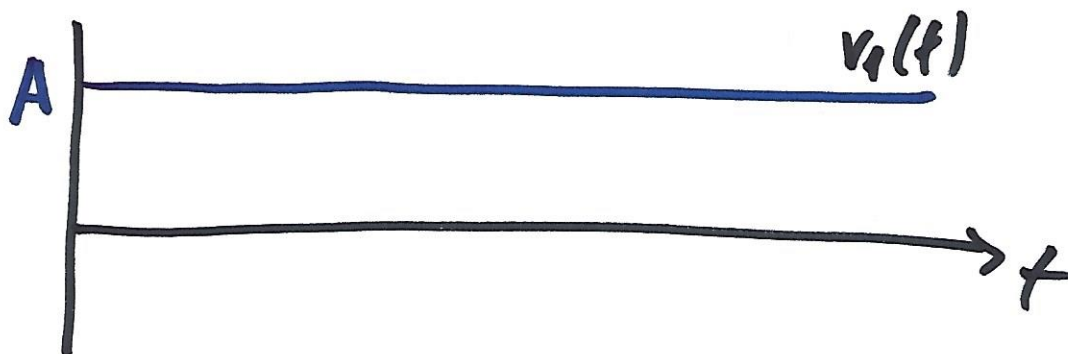
$$\bar{V} = A \text{ και } V_{\text{RMS}} = A$$



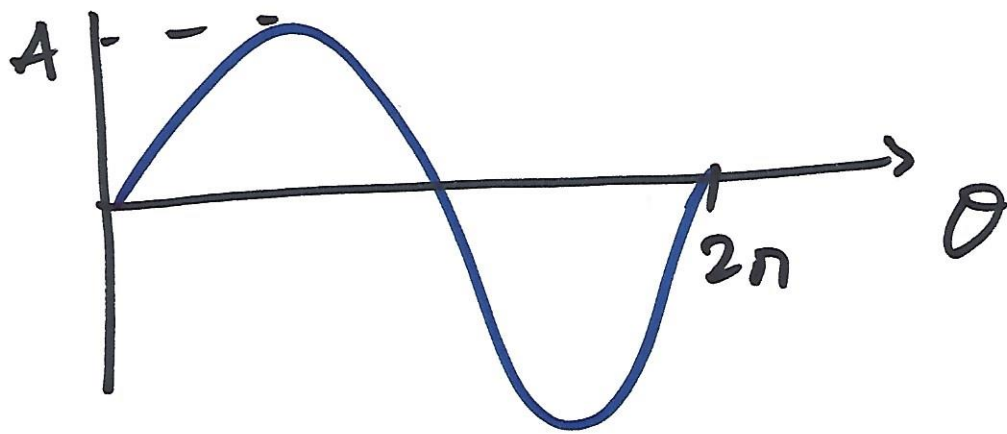
$= \text{RMS}$



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



$$\begin{aligned} \text{Evaluating } |v_2(t)| \\ &= A \\ \Rightarrow V_{2, \text{RMS}} &= A \\ &= V_{1, \text{RMS}} \end{aligned}$$



$$v(t) = A \sin \theta$$

$$V_{RMS} = \sqrt{\frac{1}{2n} \int_0^{2n} A^2 \sin^2 \theta d\theta}$$

$$= A \sqrt{\frac{1}{2n} \int_0^{2n} \frac{1 - \cos 2\theta}{2} d\theta}$$

$$= A \sqrt{\frac{1}{2n} \left[\int_0^{2n} \frac{1}{2} d\theta - \int_0^{2n} \cos 2\theta d\theta \right]}$$

$$= A \sqrt{\frac{1}{2n} \left[\frac{\theta}{2} \Big|_0^{2n} - \frac{1}{2} \sin 2\theta \Big|_0^{2n} \right]}$$

$$= A \sqrt{\frac{1}{2n} [n]}$$

$$= A \sqrt{\frac{1}{2}}$$

$$= \frac{A}{\sqrt{2}}$$

$\Rightarrow$ RMS την ΗΜΙΤΟΝΟΕΙΔΟΥΣ
συνάρτησης $= \text{Μέγιστος} / \sqrt{2}$