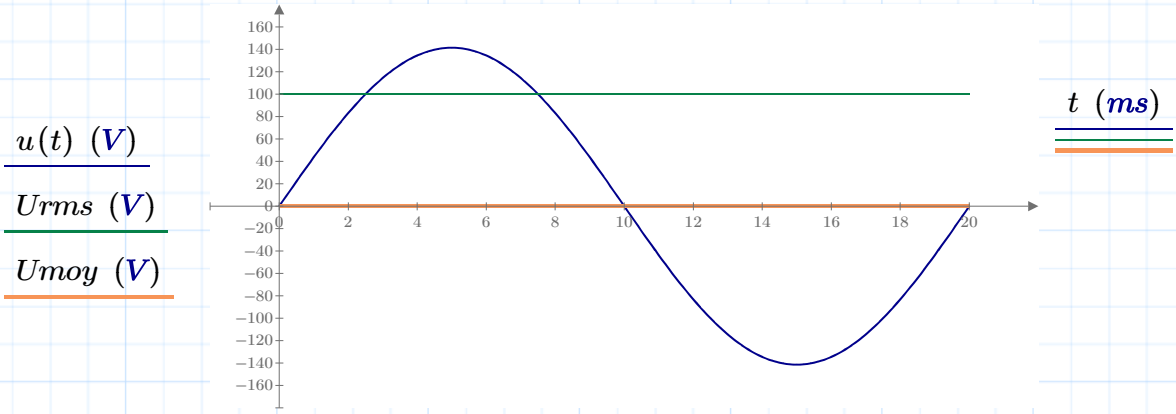
Le bon usage des calculs *Root Mean Square* et *Moy.* :

$u(t) := 100\ V \cdot \sqrt{2} \cdot \sin(2 \cdot \pi \cdot 50\ Hz \cdot t)$ $\quad t := 0, 0.1\ ms .. 20\ ms$

$$Umoy := \frac{1}{20\ ms} \cdot \int_0^{20\ ms} u(t)\, dt = 0\ V \qquad Urms := \sqrt{\frac{1}{20\ ms} \cdot \int_0^{20\ ms} u(t)^2\, dt} = 100\ V$$



$$p(t) := \frac{u(t)^2}{1000\ \Omega} \qquad \frac{(Urms)^2}{1000\ \Omega} = 10\ W$$

$$Pmoy := \frac{1}{20\ ms} \cdot \int_0^{20\ ms} p(t)\, dt = 10\ W \qquad Prms := \sqrt{\frac{1}{20\ ms} \cdot \int_0^{20\ ms} p(t)^2\, dt} = 12.2\ W$$

12.2W !? Prms n'a pas de fondement !