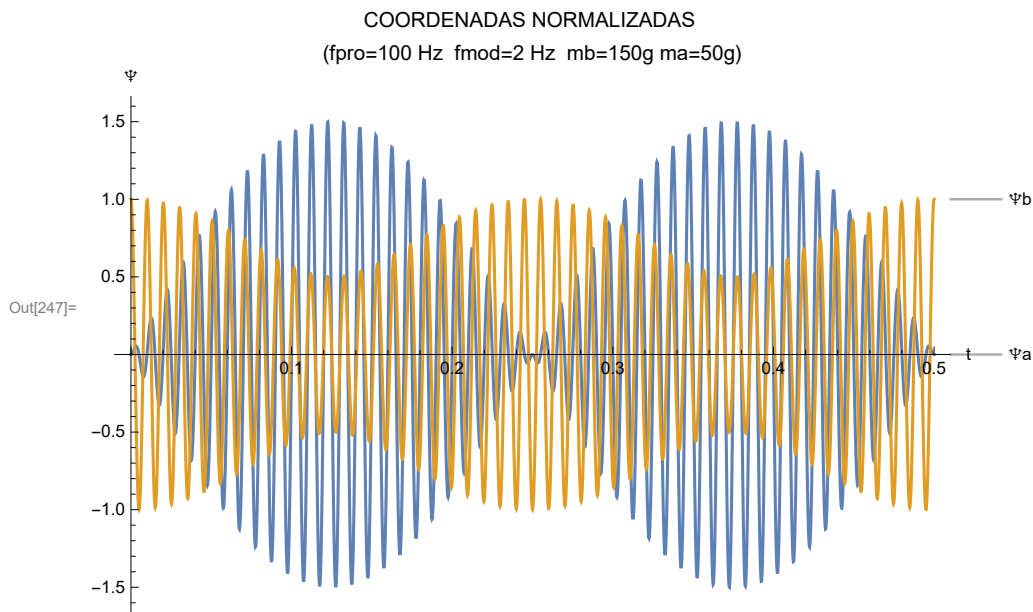


In[245]:= **ma = 50**
mb = 150

Plot [{ $\frac{2 * mb}{ma + mb} * \text{Sin}[2 \text{ Pi} * 2 * t] * \text{Sin}[2 \text{ Pi} * 100 * t]$, $\text{Cos}[2 \text{ Pi} * 2 * t] * \text{Cos}[2 \text{ Pi} * 100 * t] +$
 $\frac{mb - ma}{ma + mb} * (\text{Sin}[2 \text{ Pi} * 2 * t] * \text{Sin}[2 \text{ Pi} * 100 * t])$ }, {t, 0, 0.5},
PlotLabel → "COORDENADAS NORMALIZADAS \n (fpro=100 Hz fmod=2 Hz mb=150g ma=50g)",
PlotLabels → {"Ψa", "Ψb"}, **AxesLabel** → {"t", "Ψ"}]

Out[245]= 50

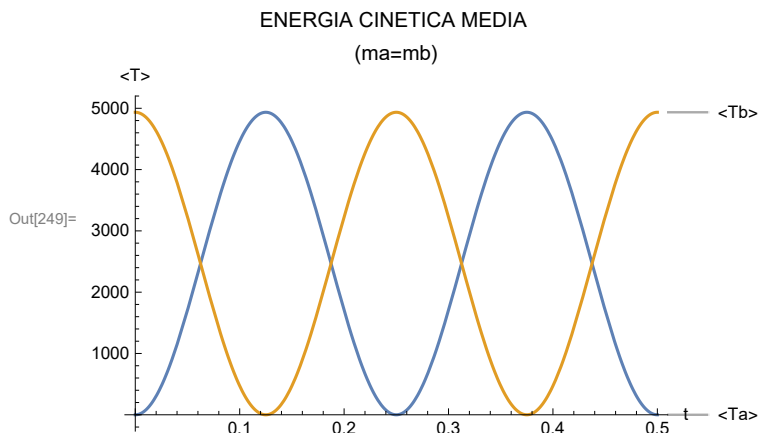
Out[246]= 150



In[248]:= **m = 50**

```
Plot[ {  $\frac{1}{4} \frac{m}{1000} * (2 \text{ Pi} * 100)^2 * \text{Sin}[2 \text{ Pi} * 2 * t]^2$ ,  $\frac{1}{4} \frac{m}{1000} * (2 \text{ Pi} * 100)^2 * \text{Cos}[2 \text{ Pi} * 2 * t]^2$  },
  {t, 0, 0.5}, PlotLabel -> "ENERGIA CINETICA MEDIA \n (ma=mb) ",
  PlotLabels -> {"<Ta>", "<Tb>"}, AxesLabel -> {"t", "<T>"} ]
```

Out[248]= 50

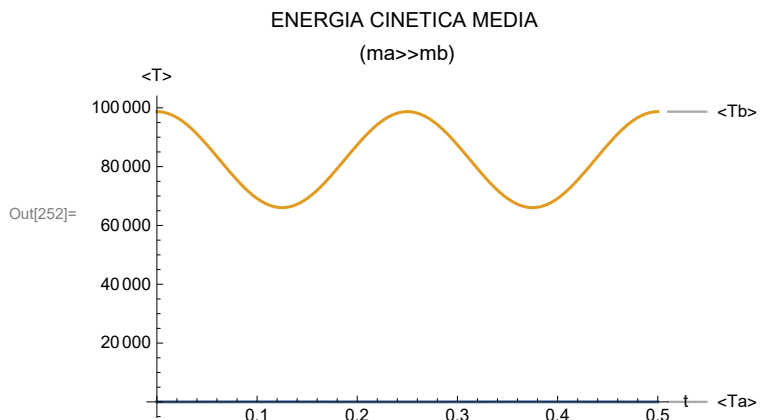


In[250]:= **ma = 10**
mb = 1

```
Plot[ {  $\frac{ma}{1000} * \left(\frac{mb}{ma + mb}\right)^2 * (2 \text{ Pi} * 100)^2 * \text{Sin}[2 \text{ Pi} * 2 * t]^2$ ,
   $\frac{mb}{4} * \left((2 \text{ Pi} * 100)^2 * \text{Cos}[2 \text{ Pi} * 2 * t]^2 + \left(\frac{mb - ma}{ma + mb}\right)^2 * (2 \text{ Pi} * 100)^2 * \text{Sin}[2 \text{ Pi} * 2 * t]^2\right)$  },
  {t, 0, 0.5}, PlotLabel -> "ENERGIA CINETICA MEDIA \n (ma>>mb) ",
  PlotLabels -> {"<Ta>", "<Tb>"}, AxesLabel -> {"t", "<T>"} ]
```

Out[250]= 10

Out[251]= 1



In[253]:=

In[254]:=