Valor medio de una senoidal en un semiperiodo positivo (asumiendo $\theta = 0°$):

$$
\begin{aligned}
Y_m &= \frac{1}{T/2}\int_0^{T/2} Y_{max}\cdot\sin(\omega\cdot t)\,dt = \\
&= \frac{Y_{max}}{T/2}\cdot\frac{1}{\omega}\cdot\Big[-\cos(\omega\cdot t)\Big]_0^{T/2} = \\
&= \frac{Y_{max}}{\pi}\Big[-\cos\Big(\underbrace{\omega\cdot\frac{T}{2}}_{=\pi}\Big)-[-\cancelto{1}{\cos(0)}]\Big] = \\
&= \frac{2\cdot Y_{max}}{\pi} \approx 0,637\cdot Y_{max}
\end{aligned}
$$