1. Period is the reciprocal of frequency so

$$
\begin{aligned}
\mathrm{T} & =1 / \mathrm{f} \\
\mathrm{~T} & =1 / 200 \mathrm{~Hz} \\
\mathrm{~T} & =0.005 \mathrm{~s}
\end{aligned}
$$

