2. This problem is quite similar to the one considered above except that the frequency is the desired quantity, so we divide both sides of the equation by the wavelength to get

$$
\begin{aligned}
& f=c / \lambda \\
& f=\left(3 \times 10^{8} \mathrm{~m} / \mathrm{s}\right) /\left(580 \times 10^{-9} \mathrm{~m}\right) \\
& \mathrm{f}=5.17 \times 10^{14} \mathrm{~Hz}
\end{aligned}
$$

