Name:
We want to approximate a solution to $2 x^{5}-7 x^{3}-10=0$. Fill in two rows of the table below using $x_{0}=2$. Round your values to four decimal places.

$$
\begin{aligned}
& f(x)=2 x^{5}-7 x^{3}-10 \\
& f^{\prime}(x)=10 x^{4}-21 x^{2}
\end{aligned}
$$

$$
\begin{array}{c|c|c|c}
x_{n} & f\left(x_{n}\right) & f^{\prime}\left(x_{n}\right) & x_{n+1}=x_{n}-\frac{f\left(x_{n}\right)}{f^{\prime}\left(x_{n}\right)} \\
\hline 2 & -2 & 76 & 2.0263 \\
2.0263 & 0.0818 & 82.3597 & 2.0253
\end{array}
$$

