## Exercise 287

For the following exercises, solve the logarithmic equation exactly, if possible.

$$
\log (2 x-7)=0
$$

## Solution

The base is 10 , the exponent is 0 , and the result is $2 x-7$.

$$
10^{0}=2 x-7
$$

Solve for $x$.

$$
\begin{gathered}
2 x-7=1 \\
2 x=8 \\
x=4
\end{gathered}
$$

