If angle ABC is bisected by line segment BD such that the measure of angle $\mathrm{ABC}=2 \mathrm{x}+1$ and measure of angle $A B D=6 x-22$. Find $x$

## Solution:



$$
\begin{gathered}
\text { angle } \mathrm{ABC}=2 * \text { angle ABD } \\
\begin{array}{c}
2 x+1=2 *(6 x-22) \\
2 x+1=12 x-44 \\
10 x=45 \\
x=4.5
\end{array}
\end{gathered}
$$

Answer: $\quad x=4.5$

