with(plots) :
$\operatorname{plot}(3 \cdot \tan (x)-\cot (x), x=-.5 . .(2 \cdot \mathrm{Pi}+.5), y=-20 . .20$, discont $=$ true $)$

solve $(3 \cdot \tan (x)-\cot (x)=0)$

$$
\begin{equation*}
\frac{\pi}{6}, \frac{5 \pi}{6},-\frac{\pi}{6},-\frac{5 \pi}{6} \tag{1}
\end{equation*}
$$

This is \#6, Section 2.5
solve $(\tan (2 \cdot x)-\cot (x)=0)$

$$
\begin{equation*}
\frac{\pi}{2},-\frac{\pi}{2}, \frac{\pi}{6}, \frac{5 \pi}{6},-\frac{\pi}{6},-\frac{5 \pi}{6} \tag{2}
\end{equation*}
$$

plot $(\tan (2 \cdot x)-\cot (x), x=-.5 . .(2 \cdot \mathrm{Pi}+.5), y=-20 . .20$, discont $=$ true $)$


