

6. An advertisement in a tennis magazine reads: "If I'm not playing tennis, I'm watching tennis. And if I'm not watching tennis, I'm reading about tennis." Assume that the speaker cannot be involved in more than one of these activities at a time. Using an appropriate truth table, determine what the speaker is doing now.

P = "Playing tennis" W = "WATCHING TENNIS" R = "READING..."

$\neg(P) \Rightarrow W$ $(\neg W) \Rightarrow R$

P	W	R	$\neg P$	$\neg W$	$\neg P \Rightarrow W$	$\neg W \Rightarrow R$
T	T	T	F	F	T	T
T	T	F	F	F	T	T
T	F	T	F	T	T	T
T	F	F	F	T	T	F
F	T	T	T	F	T	F
F	T	F	T	F	T	T
F	T	T	T	F	F	T
F	F	T	T	T	F	F

∴ WATCHING TENNIS