```
import numpy as np
import pandas as pd
import sympy.physics.wigner as wg
from sympy.physics.wigner import wigner_6j
import sympy
import itertools

Fp=range(10)
F=[4,5]
S=0.5
I=4.5
k=1
Jp=1.5
J=0.5
Lp=1
L=0

def calculate_spectator3():
    answer=''
    for i in itertools.product(Fp,F):
        #calculate Wigner 6j symbols, print if not 0
        if(wigner_6j(Jp,i[0],I,i[1],J,k)<>0):
            theNumber=sympy.simplify(wigner_6j(Jp,i[0],I,i[1],J,k)*(-1)**
(Jp+I+i[1]+k)*sympy.sqrt((2*i[0]+1)*(2*i[1]+1)))
            print theNumber
            #add some characters to make it a LaTeX table
            answer=answer+ "$F'="+str(i[0])+"$,$F="+str(i[1])+"$"
            answer=answer+"&$"+ sympy.latex(theNumber)+"$"
            answer=answer+"&"+str(theNumber.n(3))+"\\\\ \n"
    print answer
    return answer

if __name__=='__main__':
    calculate_spectator3()
```