filename = input("please input the filename ")
handle = open(filename, 'r')
n = 1
for line in handle:
    element = line.split()
p1_m1 = int(element[0])
p1_m2 = int(element[1])
p1_m3 = int(element[2])
p2_m1 = int(element[3])
p2_m2 = int(element[4])
p2_m3 = int(element[5])
die_roll_num = int(element[6])

prime_numbers = [2,3,5,7,11,13,17,19,23,29,31,37,41,43,47]

perfect_squares = [9,16,25,36, 49]

p1 = [p1_m1,p1_m2,p1_m3]
p2 = [p2_m1,p2_m2,p2_m3]
places = [p1_m1,p1_m2,p1_m3,p2_m1,p2_m2,p2_m3]
def move(pm, roll):
    location = pm + roll
    tempPlaces = places
    tempPlaces.remove(pm)
    #don't change anything if dice roll lands you on an occupied space
    if (location in tempPlaces or location > 52):
        location = pm
    #if the dice roll lands on prim number
    elif (location in prime_numbers):
        #stop if encounter occupied space while mving 6
        tmp = location
        while ((location + 1) not in tempPlaces and location<tmp+6):
            location = location + 1
        if (location > 52):
            location = tmp
    #if the dice roll lands on perf sq number
    elif (location in perfect_squares):
        #stop if encounter occupied space while mving 6
        tmp = location
        while ((location - 1) not in tempPlaces and location>tmp-6):
            location = location - 1
        elif ((pm <= 6 and location>=8) or (pm <= 11 and location>=13) or (pm <= 16 and location>=18) or (pm <= 21 and location>=23) or (pm <= 26 and location>=28) or (pm <= 34 and location>=36) or (pm <= 39 and location>=41) or (pm <= 44 and location>=46) or (pm <= 49 and location>=51)):
            # stop if going from horizontal to vertical
            if (not location%roll == 0):
                rollMul = pm + roll - (pm%roll)
                if (rollMul not in tempPlaces):
                    location = rollMul
            else:
                location = pm
    # nextMul = pm + roll - (pm%roll)
# if (nextMul in places):
#   location = pm
# else:
#   location = nextMul
if (location == 52):
    location = 0
return location

for i in range (1,die_roll_num+1):
    location = 0
    roll = int(element[6+i])

    if (i%2 == 1):
        if (min(p1) == p1_m1):
            p1_m1 = move(p1_m1, roll)
        elif (min(p1) == p1_m2):
            p1_m2 = move(p1_m2, roll)
        elif (min(p1) == p1_m3):
            p1_m3 = move(p1_m3, roll)
    elif (i%2 == 0):
        if (min(p2) == p2_m1):
            p2_m1 = move(p2_m1, roll)
        elif (min(p2) == p2_m2):
            p2_m2 = move(p2_m2, roll)
        elif (min(p2) == p2_m3):
            p2_m3 = move(p2_m3, roll)

p1 = [p1_m1,p1_m2,p1_m3]
p2 = [p2_m1,p2_m2,p2_m3]
places = [p1_m1,p1_m2,p1_m3,p2_m1,p2_m2,p2_m3]

print(str(n)+ "." + "   " + str(sum(p1)) + "   " + str(sum(p2)))
n = n+1