

#Exercice 2.3

```
def calcul_produit1(n):  
    P=1  
    for k in range(1,n+1):  
        P=P*(2**(2*k)/3**k)  
    return P
```

```
def calcul_produit2(n):  
    P=1  
    for k in range(2,n+1):  
        P=P*(1-1/k**2)  
    return P
```

#Exercice 3.1

```
def calcul_somme1(n):  
    S=0  
    for k in range(1,n+1):  
        S=S+(2*k+1)/(k**2*(k+1)**2)  
    return S
```

```
def T(n):  
    return (n*(n+2))/(n+1)**2
```