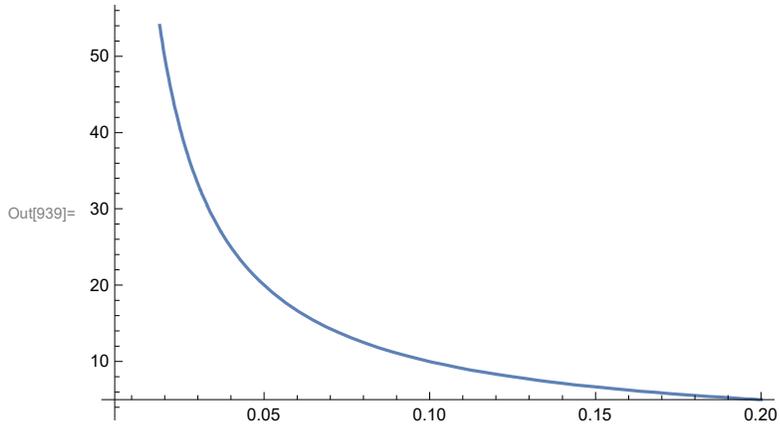


```

In[937]:= Z[r_] := 1 / r
Z[r] /. r -> .05
Plot[Z[r], {r, .005, .2}]
z[r] = -D[Z[r], r] * (r)
z[r] /. r -> .05
z[r] /. r -> .03
Plot[z[r], {r, .03, .08}]

```

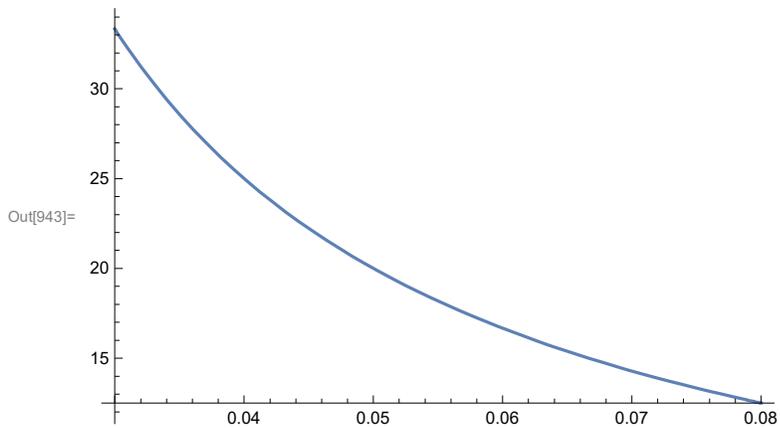
Out[938]= 20.



Out[940]= $\frac{1}{r}$

Out[941]= 20.

Out[942]= 33.3333



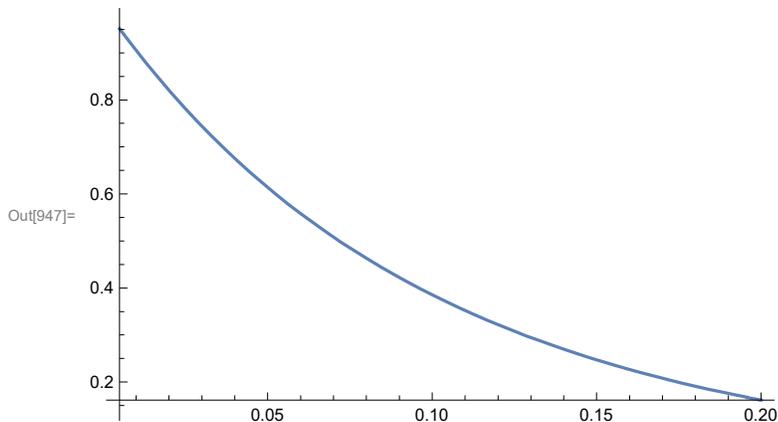
```

In[944]:= T = 10
K[r_] := 1 / ((1 + r) ^ T)
K[r] /. r -> .05
Plot[K[r], {r, .005, .2}]
k[r] = -D[K[r], r] * (1 / K[r])
k[r] /. r -> .05
k[r] /. r -> .03
Plot[k[r], {r, .03, .08}]
A = 5
P[r_] := A * ((1 / r) - (1 / (r ((1 + r) ^ T))))
P[r] /. r -> .05
Plot[P[r], {r, .005, .2}]
p[r] = -D[P[r], r] * (1 / P[r])
p[r] /. r -> .05
p[r] /. r -> .03
Plot[p[r], {r, .03, .08}]
B[r_] := (A * ((1 / r) - (1 / (r ((1 + r) ^ T)))) + (100 / ((1 + r) ^ T)))
B[r] /. r -> .05
Plot[B[r], {r, .005, .2}]
b[r] = -D[B[r], r] * (1 / B[r])
b[r] /. r -> .05
b[r] /. r -> .03
Plot[b[r], {r, .03, .08}]

```

Out[944]= 10

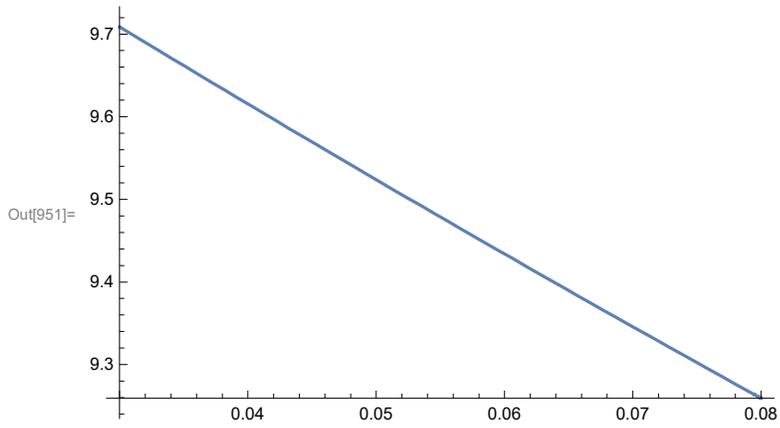
Out[946]= 0.613913



Out[948]= $\frac{10}{1 + r}$

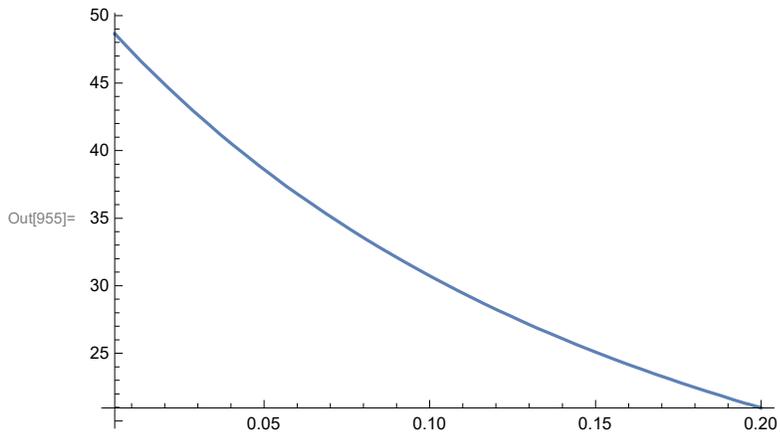
Out[949]= 9.52381

Out[950]= 9.70874



Out[952]= 5

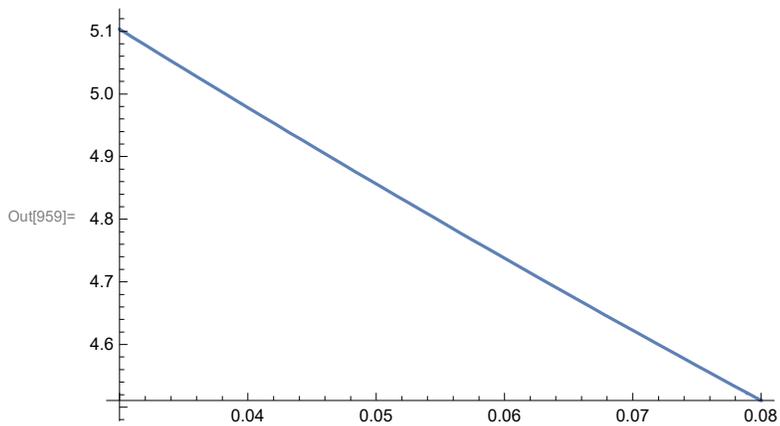
Out[954]= 38.6087



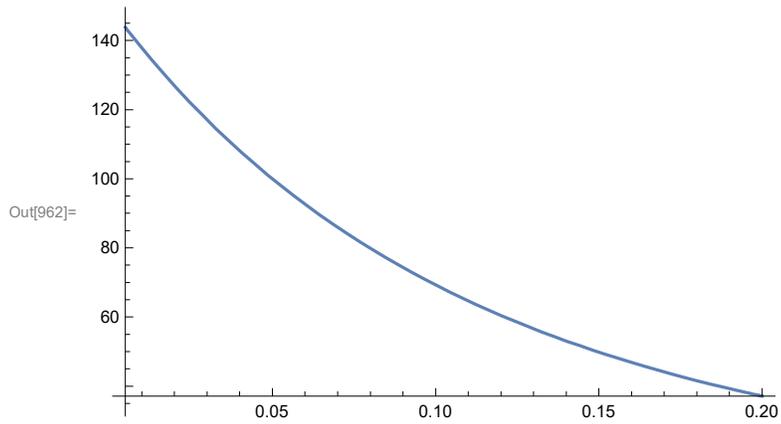
$$\text{Out[956]} = - \frac{-\frac{1}{r^2} + \frac{10}{r(1+r)^{11}} + \frac{1}{r^2(1+r)^{10}}}{\frac{1}{r} - \frac{1}{r(1+r)^{10}}}$$

Out[957]= 4.85627

Out[958]= 5.1034



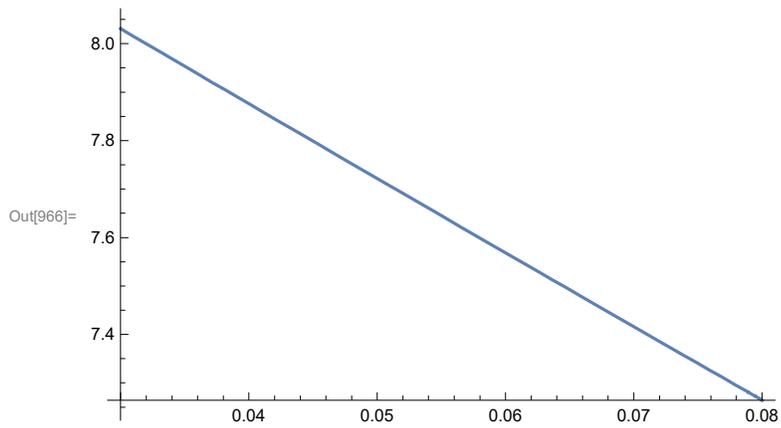
Out[961]= 100.



$$\text{Out[963]} = \frac{\frac{1000}{(1+r)^{11}} - 5 \left(-\frac{1}{r^2} + \frac{10}{r(1+r)^{11}} + \frac{1}{r^2(1+r)^{10}} \right)}{\frac{100}{(1+r)^{10}} + 5 \left(\frac{1}{r} - \frac{1}{r(1+r)^{10}} \right)}$$

Out[964]= 7.72173

Out[965]= 8.03078



In[967]:=