

```
[> restart;|
```

Set up function, standard options, etc.

```
> y := (X-Xmin)/(Xmax-Xmin);
> G := y*(G2+m*T*ln(y)) + (1-y)*(G1+m*T*ln(1-y)) + y*(1-y)*W;
```

$$y := \frac{X - X_{\min}}{X_{\max} - X_{\min}} \quad (1.1)$$

$$G := \frac{(X - X_{\min}) \left(G_2 + m T \ln \left(\frac{X - X_{\min}}{X_{\max} - X_{\min}} \right) \right)}{X_{\max} - X_{\min}} + \left(1 - \frac{X - X_{\min}}{X_{\max} - X_{\min}} \right) \left(G_1 \right. \\ \left. + m T \ln \left(1 - \frac{X - X_{\min}}{X_{\max} - X_{\min}} \right) \right) + \frac{(X - X_{\min}) \left(1 - \frac{X - X_{\min}}{X_{\max} - X_{\min}} \right) W}{X_{\max} - X_{\min}}$$

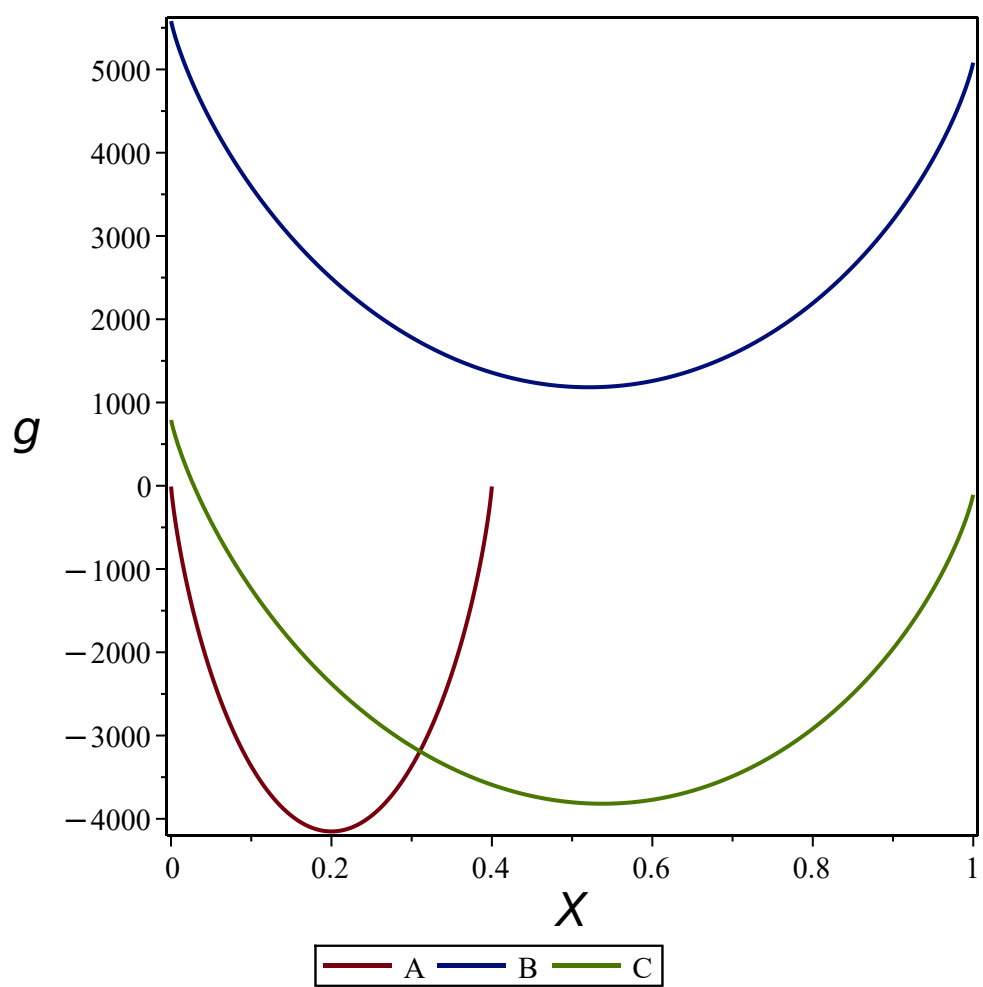
```
> varsA := Xmin=0. , Xmax=0.4, m=1,W=0,G1=0,G2=0;
> varsB := Xmin=0 , Xmax=1 , m=1,W=0,G1=300+(T-700),G2=-200+
(T-700);
> varsC := Xmin=0 , Xmax=1 , m=1,W=0,G1=800,G2=-100;
varsA := Xmin = 0., Xmax = 0.4, m = 1, W = 0, G1 = 0, G2 = 0
varsB := Xmin = 0, Xmax = 1, m = 1, W = 0, G1 = -400 + T, G2 = -900 + T
varsC := Xmin = 0, Xmax = 1, m = 1, W = 0, G1 = 800, G2 = -100
```

$$(1.2)$$

```
> plot_options := legend=["A","B","C"], labelfont = ["HELVETICA",
18], thickness=2, legendstyle = [font= ["HELVETICA", 18]], axes=
boxed;
plot_options := legend = ["A", "B", "C"], labelfont = ["HELVETICA", 18], thickness = 2,
legendstyle = [font = ["HELVETICA", 18]], axes = boxed
```

$$(1.3)$$

```
> plot(subs(T=5990,[subs(varsA,[X,G,X=Xmin..Xmax]),subs(varsB,[X,G,X=
Xmin..Xmax]),subs(varsC,[X,G,X=Xmin..Xmax])]), 0..1, plot_options,
labels=['X','g']);
```



> 360,400,700, 890