In [1]:
```
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
df=pd.read_csv('carprice.csv');
#df.head(2)
df
```

Out[1]:

	Year	percent
0	1	80
1	2	70
2	3	60
3	4	50
4	5	50
5	6	45

In [2]:
```
mean_x=np.mean(df['Year'])
mean_y=np.mean(df['percent'])

length= len(df['Year'])
numer=0.0
dnum=0.0
```

In [ ]:
```
```

In [3]:
```
for i in range(length):
    numer+=(df['Year'][i]-mean_x)*(df['percent'][i]-mean_y)
    dnum+=(df['Year'][i]-mean_x)*(df['Year'][i]-mean_x)
```

In [4]:
```
cof_= numer/dnum
print(cof_)
```

```
-7.0
```

In [5]:
```
intercept_=mean_y -(mean_x*cof_)
print(intercept_)
```

```
83.66666666666666
```

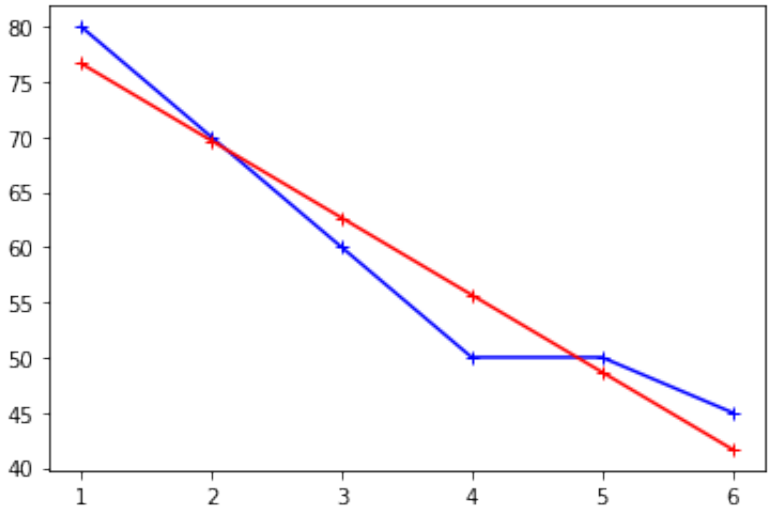
In [6]:
```
def predeict(x):
    return x*cof_+intercept_
```

In [7]:
```
#predeict(1)
predeict(6)
```

Out[7]:
```
41.66666666666666
```

In [8]:
```
plt.xlabel='Year'
plt.ylabel='Percent'
#plt.scatter(df.Year,df.percent,color='RED', marker='+')
plt.plot(df.Year,df.percent,color='blue',marker='+')
plt.plot(df.Year, predeict(df.Year),color='RED',marker='+')
```

Out[8]:
```
[<matplotlib.lines.Line2D at 0x11dcafa90>]
```



In [ ]:

In [ ]: