

```
In[1]:= g = Import["c:\\mws\\mss\\Sensing_&_Sensors\\L02TH\\vignetting\\mws.jpg"]
```



Out[1]=

```
In[2]:= Show[g]
```



Out[2]=

```
In[3]:= xip = pix = g[[1, 1]];
```

```
In[4]:= {Dimensions[pix], Dimensions[xip]}
```

```
Out[4]= {{240, 185}, {240, 185}}
```

```
In[5]:= radmax = 0.5 * Sqrt[240^2 + 185^2];  
focallength = 1. * radmax;  
For[i = -120, i ≤ 119, ++i,  
  For[j = -92, j ≤ 92, ++j,  
    radius = Sqrt[i^2 + j^2];  
    weight = (1 + (radius / focallength)^2)^-2;  
    xip[[121 + i, 93 + j]] = Round[weight * pix[[121 + i, 93 + j]]]]]
```

```
In[9]:= Show[GraphicsRow[{Graphics[Raster[ $\frac{\text{pix}}{255}$ ], AspectRatio → Automatic],  
Graphics[Raster[ $\frac{\text{xip}}{255}$ ], AspectRatio → Automatic]}]]
```

Out[9]=

