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# Task 1

**Emissivity:**
The emissivity ratio is between 0 and 1, it shows how a surface is close to black body. If the Ɛ is near 1 it means our body is near black body feature. The emissivity from the surface is different in wavelength and frequencies.

**Absorptivity:**
The Absorptivity ratio is between 0 and 1, it shows how a surface is close to black body. If the Ɛ is near 1 it means our body is near black body feature. The Absorptivity from the surface is different in wavelength and frequencies.

**Kirchhoff's law:**
**the total emissivity of a surface at temperature T is equal to its total absorptivity for radiation coming from black body in the same temperature.**

**Reflectivity:**
the reflectivity is same as absorptivity and emissivity has a ratio between 0 and 1.

**View Factor:**
The view factor is a quantity that is corresponded to the fraction of the radiation leaving one surface and that is absorbed by another surface. The most important feature of view factor is it is not depend on the surface properties.

**Radiative residence**
it is a quantity which is a value to calculate the energy that release from resistance which converted heat radiation.

**The heat exchange between black and gray surface**
Radiation leaving by surface1 or absorbing by surface 2 minor radiation leaving by surface2 or absorbing by surface1 but in gray surface body we should calculate the quantity of heat which leaves surface A or absorbed by surface B.

# TASK 2