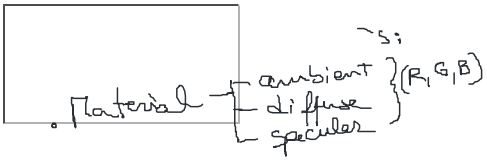
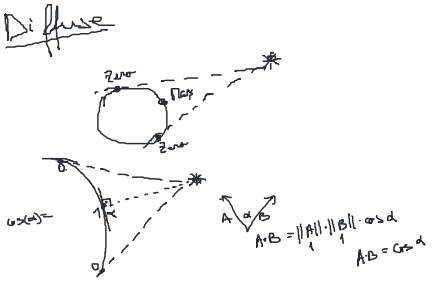
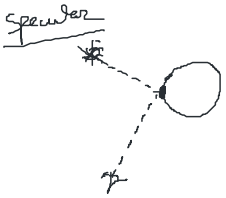
Lecture 02

Wednesday, October 6, 2021 16:37








```
L: light position vector
C: camera position vector (view point)
V: intersection position vector
E: vector from the intersection point to the camera (normalized)
N: normal to the surface at the intersection point (normalized)
T: vector from the intersection point to the light (normalized)
R: reflection vector (normalized)
     R = N*(N*T)*2 - T

Color = material.ambient*light.ambient;

IF(N*T > 0)
  Color += material.diffuse*light.diffuse*(N*T)

IF(E*R > 0)
  Color += material.specular*light.specular*pow(E*R, material.shininess)

Color *= light.intensity
```