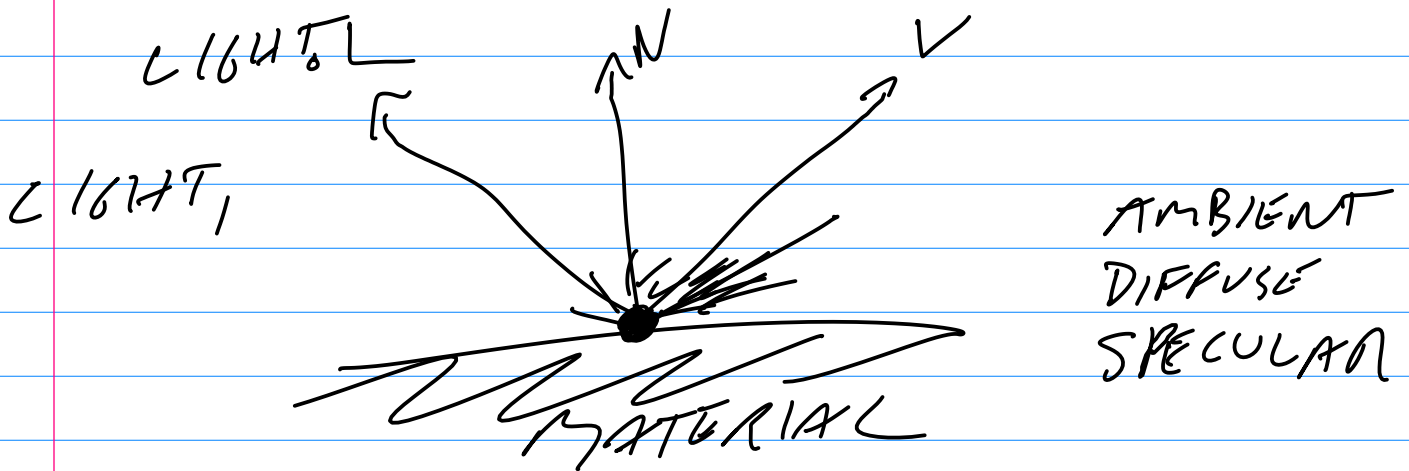



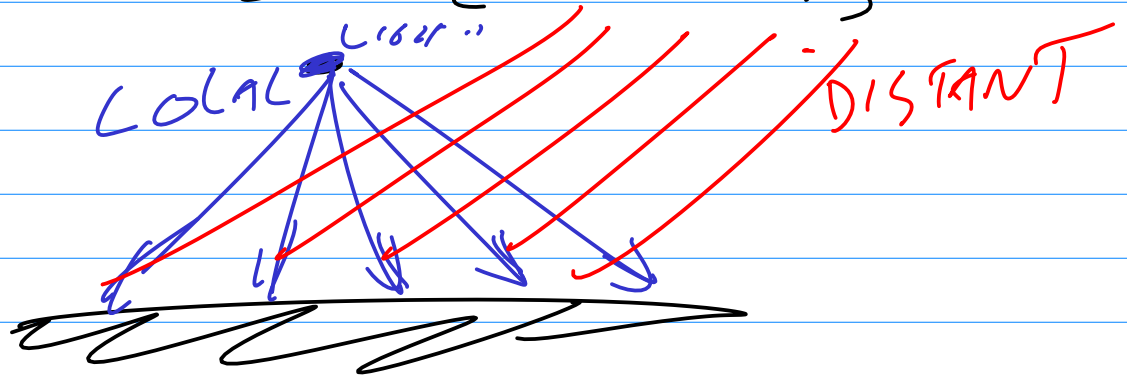
REVIEW OF LIGHTING



OPENGL LIGHT ATTENUATION WITH DISTANCE

- SPOTLIGHTS 
- 2 SIDED FACES
- MUST SPECIFY NORMALS

EFFECT OF LOCAL LIGHTS



YOU CAN HAVE SOME LIGHTS
FIXED IN SCENE AND OTHERS
MOVING WITH VIEWER.

IT DEPENDS ON MODELVIEW
MATRIX WHEN YOU SPEC
THE LIGHT POS

ATTENUATION

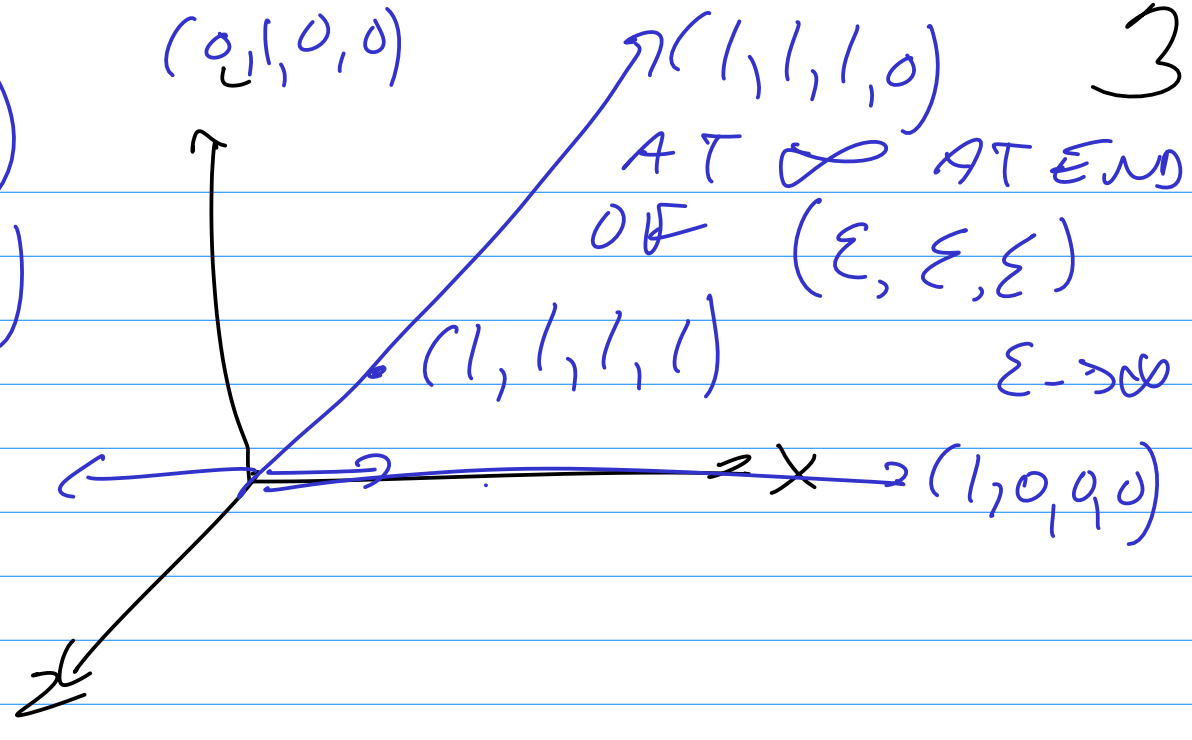
FACTOR =

$$\frac{1}{(A) + (B)d + (C)d^2}$$

SETTABLE.

DISTANCE

$(1, 1, 1, \omega)$
 $(\frac{1}{\omega}, \frac{1}{\omega}, \frac{1}{\omega})$
 $\omega \rightarrow 0$



DIFFERENT WAYS TO SPEC COLORS.

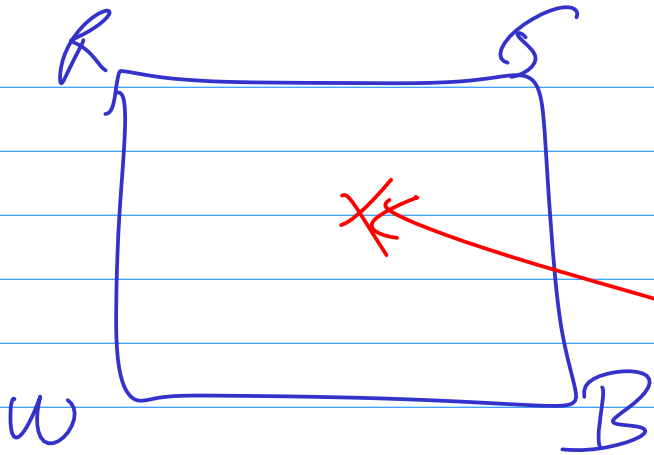
4

1. SET COLOR @ VERTS

OR 2 SET LIGHT + MATERIAL
PROPERTIES. USE PHON'S
LIGHTING EQUATION.

OR 3 COMBINE 1 + 2

WHY? ^{OPENGL} GETS MATERIAL COLORS FROM
A COLOR ARRAY. YOU DON'T
CALL A ROUTINE WITH EACH COLOR
CHANGE



YOU SPEC THE VERTEX COLORS.
WHAT COLOR IS THIS

NEXT TEXTURE MAP

