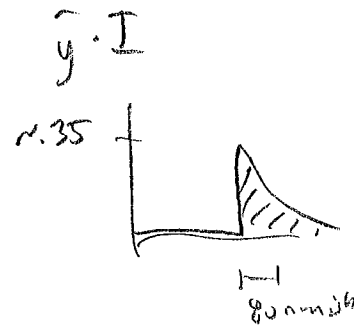
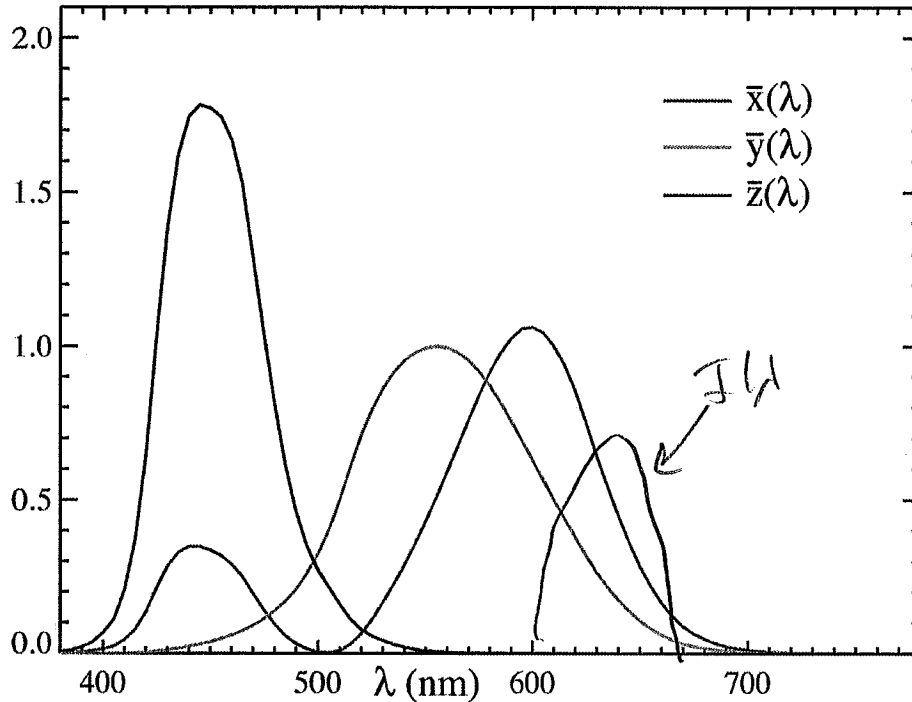


day 41

Color, part 1

→ See PPT file!

# Overlap Integrals: Example



$$\begin{aligned}
 X &= \int \bar{x}(\lambda) I(\lambda) d\lambda \approx 20 \\
 Y &= \int \bar{y}(\lambda) I(\lambda) d\lambda \approx 10 \\
 Z &= \int \bar{z}(\lambda) I(\lambda) d\lambda = 0
 \end{aligned}$$

Normalize:

$$\begin{aligned}
 x &= 20/30 && \approx .667 \\
 y &= 10/30 && \approx .333 \\
 z &= 0 && \\
 &&& z = 1 - x - y
 \end{aligned}$$

- Note that x, y, and z are not independent
- **x and y completely specify color**
- Y specifies overall intensity (brightness)