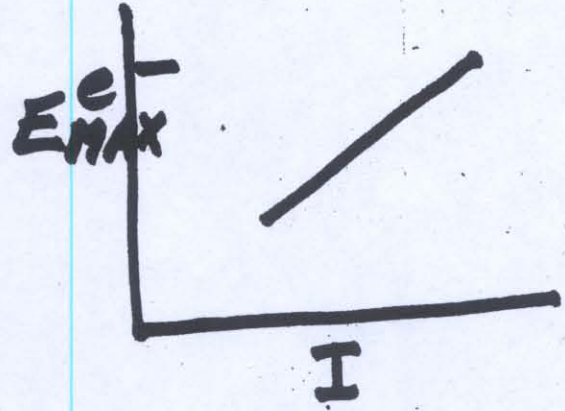
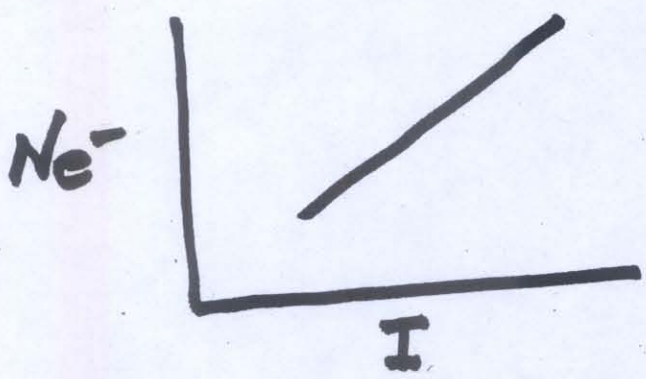


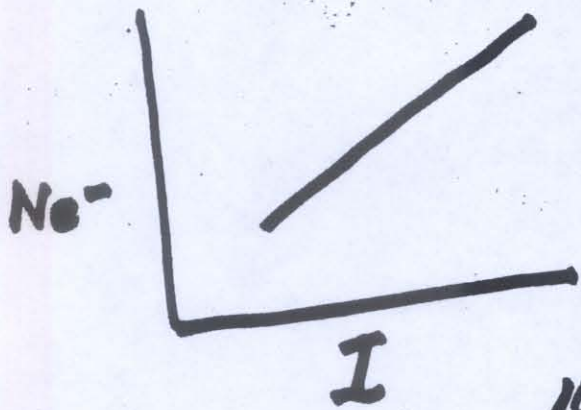
PHOTO-ELECTRIC Effect

Light strikes metal, ejects electrons

Classically expect N_{e^-} & $E_{MAX}^{e^-}$ to increase with INTENSITY $I = (A)^2$



Instead observe



N_{e^-} behaves as expected, But surprise:
 $E_{MAX}^{e^-}$ is constant with I , but increases with frequency, f

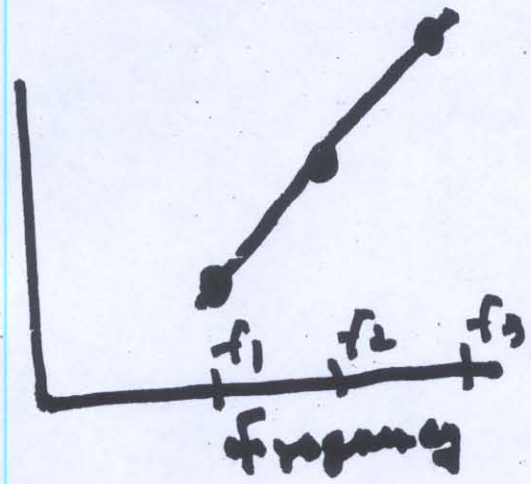
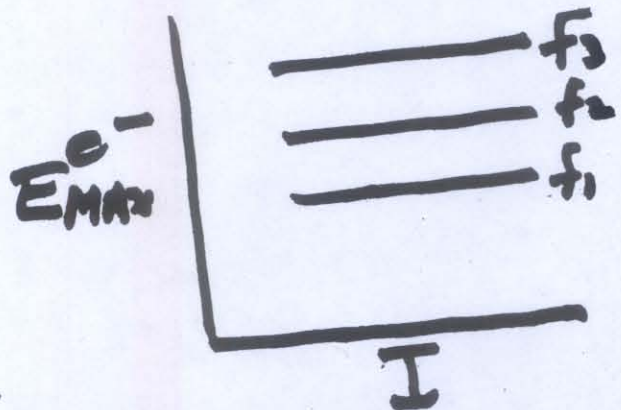
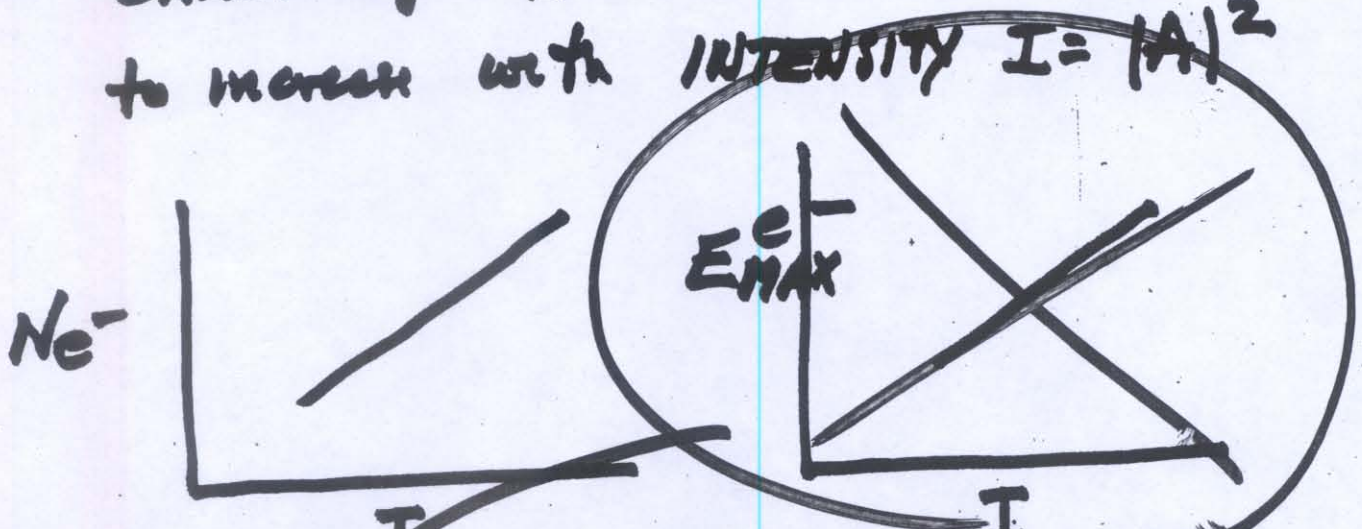


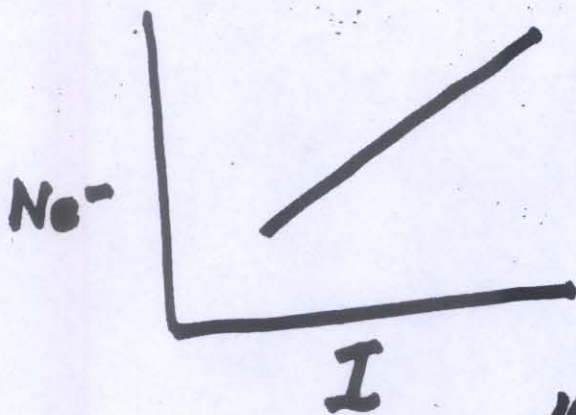
PHOTO-ELECTRIC EFFECT

Light strikes metal, ejects electrons

Classically expect N_{e^-} & $E_{MAX}^{e^-}$ to increase with INTENSITY $I = |A|^2$



Instead observe ~~DOES NOT OCCUR~~
INSTEAD ↴



N_{e^-} behaves as expected, But surprise:
 $E_{MAX}^{e^-}$ is constant with I ,
 but increases with frequency, f

