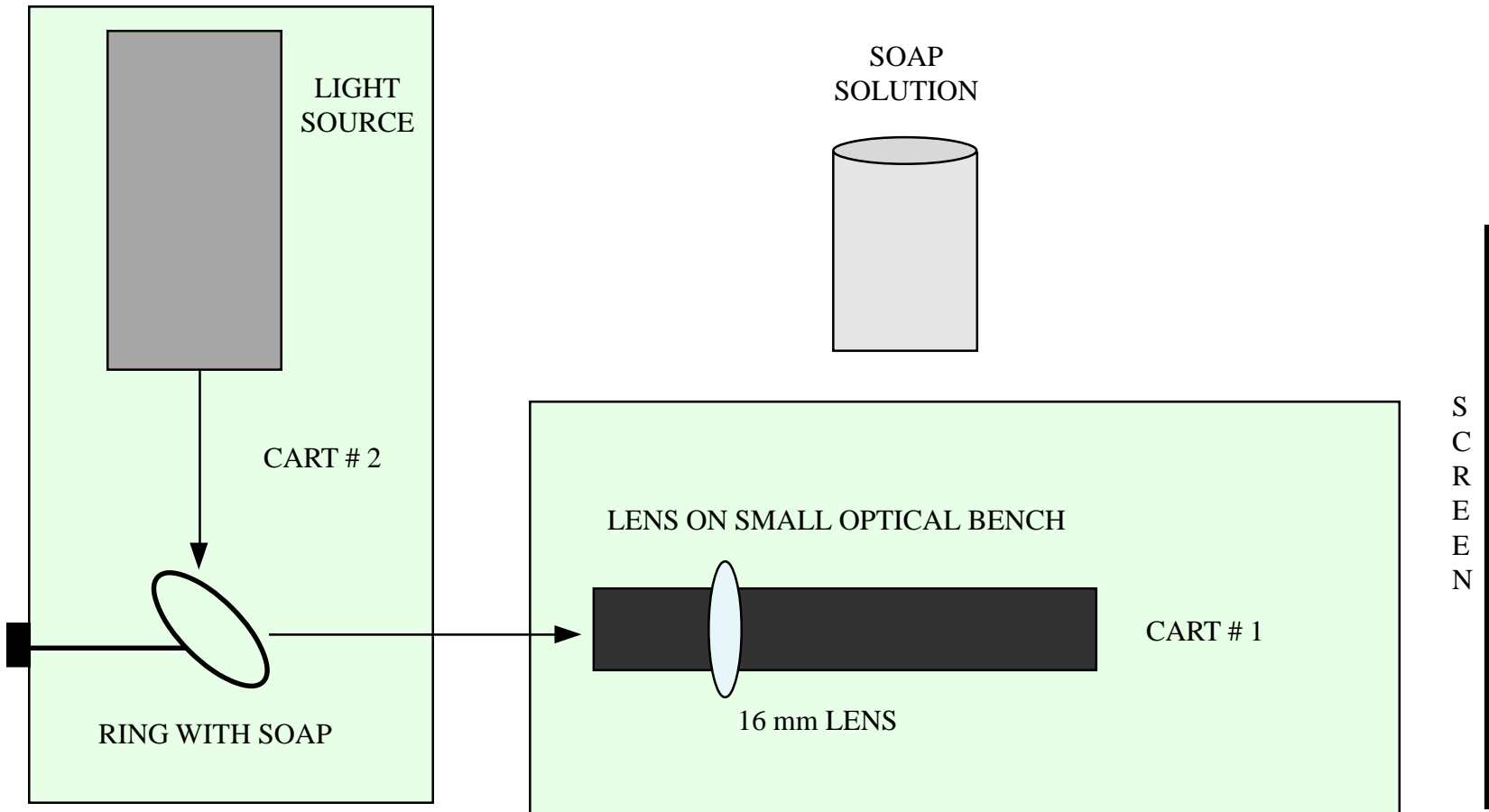


INTERFERENCE IN THIN FILMS
6D30.20



RING MUST BE AT A 45° ANGLE FROM THE LIGHT SOURCE AND THE LENS ON OPTICAL BENCH. LENS AND LIGHT SOURCE ARE AT A 90° ANGLE FROM EACH OTHER. AN IMAGE WILL APPEAR ON THE SCREEN THAT IS ENLARGED AND INVERTED. THIS DEMO IS BEST SET UP ON TWO CARTS.

DIP RING INTO BUCKET OF SOAP SOLUTION BY MOVING BUCKET. SHINE LIGHT ON THE RESULTING FILM. IMAGE WILL APPEAR ON THE SCREEN THAT WILL DEVELOP BLUE AND RED STRIPES. THESE STRIPES SHOW CONSTRUCTIVE AND DESTRUCTIVE INTERFERECE AT DIFFERENT WAVE LENGTHS.