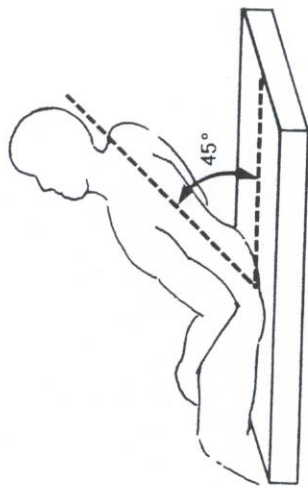
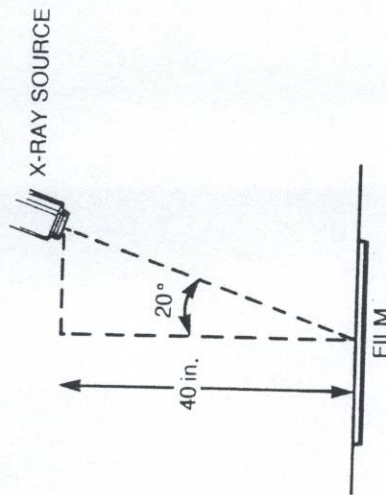


When taking an A ray of the lumbar spine, one view of the series requires the sitting patient's back to be at a  $45^\circ$  angle, as shown here. Pillows can be used to hold the back at this awkward position. If the distance from the base of the spine to the back of the neck is 66 cm, what is the distance the back of the neck must be raised to create a  $45^\circ$  angle? (Assume the spine will be essentially straight.)



### EXERCISE 12:

Another X-ray view requires the X-ray source to be positioned at an angle of  $20^\circ$  from the centerline, yet still be 40 inches vertically from the table, as shown here.



- How far should the X-ray source be offset from the centerline? (In other words, what is the horizontal distance that the source should be offset?)
- Will the source be closer or farther than 40 inches from the center of the film? How much more or less than 40 inches will the source be positioned from the centerline of the film?

6.4.5  
Unit 2 day