## Recessed Lights

Recessed lamps are shaped like cans and recess into any ceiling. The manufacturer guarantees that a room will be "well lit" in the 4 ft radius around the center of each recessed lamp when using the standard bulb. Determine the arrangement that would guarantee the minimal amount of recessed lamps necessary to make sure that a $14 \times 16 \mathrm{ft}$ room is $100 \%$ "well lit." How many lamps does that arrangement require?


