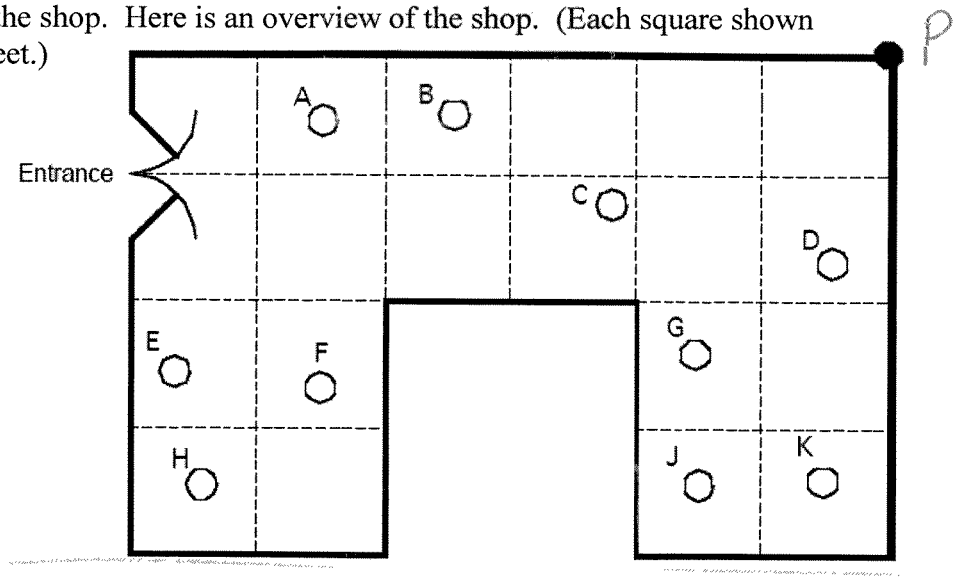
Geometry Performance Task #3 Name _____

Period ____

Security Camera

Show all of your work carefully and neatly.

A shop owner wants to prevent shoplifting. He decides to install a security camera on the ceiling of his shop. The camera can turn 360°. The shop owner places the camera at Point P, in the corner of the shop. Here is an overview of the shop. (Each square shown measures 10 feet by 10 feet.)



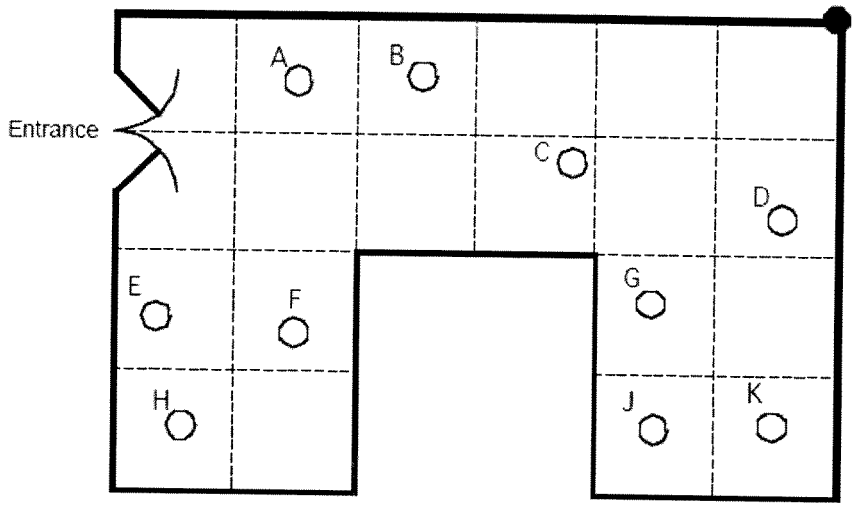
1.The plan shows ten people standing in the shop. They are labelled A, B, C, D, E, F, G, H, J and K. Which people cannot be seen by the camera at P? Tell how you know.

_____

_____

2.The shopkeeper says that 15% of his shop is hidden from the camera. Is this true? You will need to draw on the picture above and show your calculations.

3. Show the best place for the camera, so that it can "see" as much of the shop as possible. Explain how you know this is the best place. Again you will need to draw on the picture and show calculations.



The camera should be placed at Point ___ because then only ___ % of the shop will be hidden from the camera's view.