

Polly Gone

Level D

A new arena is going to be constructed at a local university.

A study is being done to find the best design for the performance or playing area. Since the arena will be used for many different sports, as well as shows and concerts, the designers want a seating arrangement that allows spectators to be as close as possible to the action.

They also want to seat as many front-row spectators as possible around the performance area. They have also decided that the boundary of the performance area needs to have straight sides—no curves due to the building materials they are using. The goal is to have front-row seats no more than 20 meters from the center of the performance or playing area.

They want to hire you as a consultant to investigate this matter and explain to them which design would best suit their needs. They need to see several examples of possible performance-area designs that fit their constraints. The final recommendation must explain the advantages of the design in terms of the size of the playing area and the number of people they can seat in the front row.

