

# Equations of Circles

The owners of an outdoor adventure course want a way to communicate with all points on the course. They are considering purchasing walkie-talkies with a range of  $\frac{1}{2}$  mi. A model of the course is at the right. Each grid unit represents  $\frac{1}{8}$  mi. The base station is at  $(2, 4)$ . Do you think the owners should buy the walkie-talkies? Why or why not? How can you prove your point?

