



12-5 Solve It!




I'd like to know that help is on its way if I fall on the course's climbing wall!

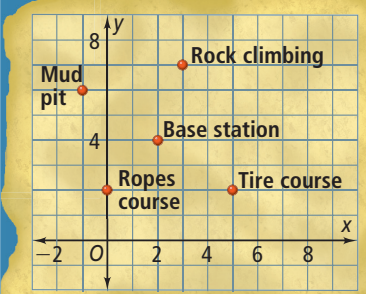


SOLVE IT!

Getting Ready!



The owners of an outdoor adventure course want a way to communicate to all points on the course. They are considering purchasing a walkie-talkie 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-talkie? Why?



12-5 Lesson Quiz

1. Write the standard equation of the circle with center $(5, -4)$ and radius 3.
2. What is the equation of the circle with center $(1, -6)$ that passes through the point $(-4, 3)$?
3. **Do you UNDERSTAND?** What is the center and radius of the circle with equation $(x + 4)^2 + (y + 1)^2 = 49$? Graph the circle.

Answers

Solve It!

Yes; the base station is located less than $\frac{1}{2}$ mi from all of the obstacles.

Lesson Quiz

1. $(x - 5)^2 + (y + 4)^2 = 9$
2. $(x - 1)^2 + (y + 6)^2 = 106$
3. center $(-4, -1)$; radius 7

