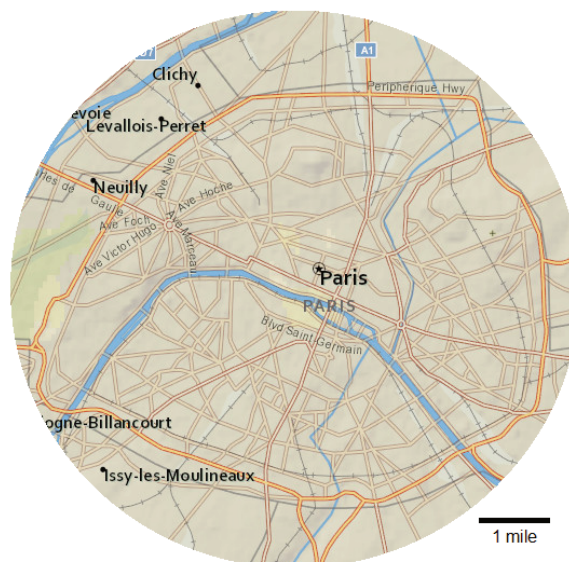


Lesson 19 Practice Problems

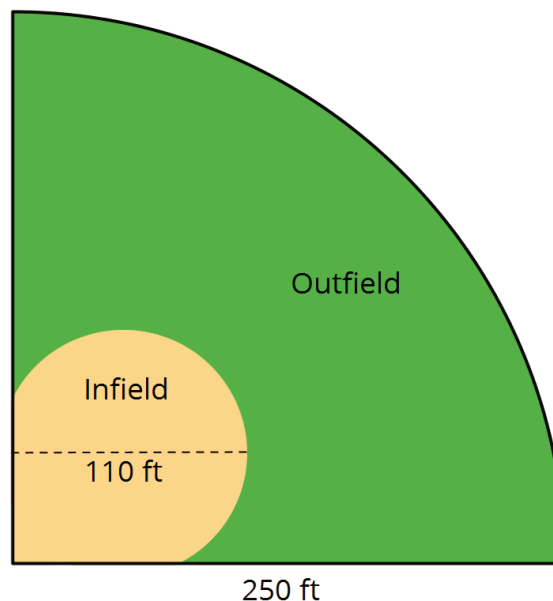
1. For each problem, decide whether the circumference of the circle or the area of the circle is most useful for finding a solution. Explain your reasoning.
 - a. A car's wheels spin at 1000 revolutions per minute. The diameter of the wheels is 23 inches. You want to know how fast the car is travelling.
 - b. A circular kitchen table has a diameter of 60 inches. You want to know how much fabric is needed to cover the table top.
 - c. A circular puzzle is 20 inches in diameter. All of the pieces are about the same size. You want to know about how many pieces there are in the puzzle.
 - d. You want to know about how long it takes to walk around a circular pond.

2. The city of Paris, France is completely contained within an almost circular road that goes around the edge. Use the map with its scale to:
 - a. Estimate the circumference of Paris.
 - b. Estimate the area of Paris.



3. Here is a diagram of a softball field:

- About how long is the fence around the field?
- About how big is the outfield?



4. While in math class, Priya and Kiran come up with two ways of thinking about the proportional relationship shown in the table.

x	y
2	?
5	1750

Both students agree that they can solve the equation $5k = 1750$ to find the constant of proportionality.

- Priya says, "I can solve this equation by dividing 1750 by 5."
- Kiran says, "I can solve this equation by multiplying 1750 by $\frac{1}{5}$."

- What value of k would each student get using their own method?
- How are Priya and Kiran's approaches related?
- Explain how each student might approach solving the equation $\frac{2}{3}k = 50$.

(From Unit 5, Lesson 2.)