

1. What is population density?
2. A population of 820 insects lives in a 1.2-acre area. They gather nectar from a population of 560 flowering plants. The plants live in a 0.2-acre area. Which population has greater density, the insects or the plants? Why?
3. Find the population density of PlayStation 4 owners if there are 972,676 systems in the United States if the area of the United States is 3,794,083 square miles.
4. A California-based dairy farm has 1,500 cows in their milking herd that collectively produce 187,500 pounds of milk per square kilometer of grazing pasture, for a total of 7,540,000 pounds of milk products. How many square kilometers do the cows get to roam around on?
5. An award-winning BBQ team would like to open their first restaurant but can't decide whether to put their location downtown or near the stadium. Their business manager tells them they should open their restaurant when the ratio of existing BBQ joints per person is less than 0.01. The population density of the 30-city-block downtown area is 230 people per city block, but there are already 46 BBQ joints in the area (including food trucks). The population of the 30 block stadium area is 130 people per block, and there are 25 BBQ joints. Where, if anywhere, should they open their restaurant? Explain your reasoning.