On your Mark: You work for Granite Falls, a town which needs to move a playground due to harmful levels of lead (Pb) in the ground. The surface's height represents the concentration of lead (in $\frac{\text{g}}{\text{m}^2}$) in the topsoil at every location in Granite Falls. Lead levels range from $0.5\frac{\text{g}}{\text{m}^2}$ to $6\frac{g}{m^2}$.

1. The park is currently located at the red star. Mark all points on the surface with the same concentration of lead as the park.
2. Mark all points with lead concentrations $1\frac{\text{g}}{\text{m}^2}$ higher and $1\frac{\text{g}}{\text{m}^2}$ lower than at the park.
3. Could these curves intersect? Why or why not?
4. Sketch the curves by projecting them down onto a sheet of paper. Give appropriate labels.

Get Set: Granite Falls is a 10 km $\times$ 10 km town in the 15.5 km $\times$ 21.5 km Rock County. Find where the town is located in the county and place it there. Explain how you know you found the right location.
Go: The park measures 20 m $\times$ 20 m at the red star. Determine the total mass of lead at the current location. Give units.
Challenge: The town wants to guarantee the total amount of lead in the park is less than 600 g. Find a location near the red star that achieves this level. Explain how you found this new location.

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