

## Geometry: GIS Analyst

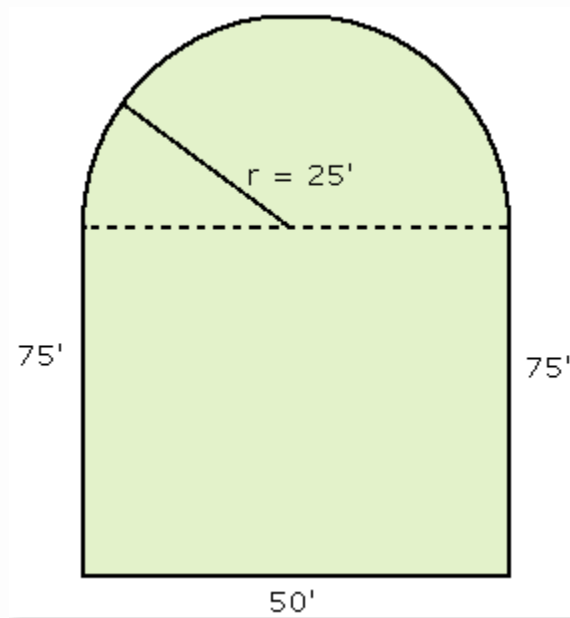
Idaho State Tax Commission

**Job Description: Perform geographical analysis on land values, land types, and determine fair market values over different geographical areas.**

---

### Problem:

Jim, an appraiser, needs to find the value of a lot in a subdivision. He knows that land prices in this particular area are selling at \$6.25 per square foot. Jim has the following lot to appraise, but he must first find the square footage to determine the appraised value of the lot.



## Geometry: GIS Analyst

Idaho State Tax Commission

**Job Description: Perform geographical analysis on land values, land types, and determine fair market values over different geographical areas.**

### Problem:

Jim, an appraiser, needs to find the value of a lot in a subdivision. He knows that land prices in this particular area are selling at \$6.25 per square foot. Jim has the following lot to appraise, but he must first find the square footage to determine the appraised value of the lot.

### Solution:

$$\text{Area of circle} = \pi r^2$$

$$\text{Area of } \frac{1}{2} \text{ circle} = (\pi r^2)/2$$

$$= (\pi(25)^2)/2$$

$$= 981.75 \text{ sq. ft.}$$

$$\text{Area of square} = \text{length} \times \text{width}$$

$$= 75 \text{ ft.} \times 50 \text{ ft.}$$

$$= 3,750 \text{ sq. ft.}$$

$$\text{Square} + \text{half circle} = 3,750 + 981.75 = 4,731.75 \text{ sq. ft.}$$

$$\$6.25 \times 4,731.75 = \$29,573.44$$

