

Geometry in Design: Question 2

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- i Find the total perimeter of the grazing area.
- ii If the cost of the fence is \$ 7.95 per linear foot, how much will it cost to place a fence around the entire grazing area?
- iii Suppose the grazing area is $1/60$ of an industrial grazing area for a major industry farm. What is the total cost to build a fence around the entire land of a large scaled farm?

Part I Solution:

$$A = \frac{1}{2}aP \quad (1)$$

$$a = 10 \quad (2)$$

$$A = 500 \quad (3)$$

$$500 = \frac{1}{2}10P \quad (4)$$

$$P = \frac{500}{5} \quad (5)$$

$$P = 100 \quad (6)$$

Part II Solution:

$$Cost = \$7.95 * 100 = \$795 \quad (7)$$

Part III Solution:

$$TotalCost = 60 * Cost = 60 * 795 = \$47,700 \quad (8)$$