

The teacher will need to see all of your work. Mark (x) off each one as you use it. Be sure to include the following:

- Pictures, charts, graphs, or t-tables that support
- your explanation
- A written explanation with detailed sentences
- The equation or number sentence
- The answer (Ask yourself: Is my answer reasonable? Why or why not?)
- The solution in more than one way or related to other situations

Teacher Use Only

Analytical Score:

Understanding **N A P E**

Strategy/Reasoning **N A P E**

Communication **N A P E**

Holistic Score **N A P E**

Name: _____ Grade: _____ Date: _____

Teacher: _____ School: _____

Lenny the Lazy Lawn Mower

Lazy Lenny mows lawns in the summer for extra money. He wondered how he could mow a lawn with the least amount of walking. So one week, on a 50' X 50' lawn, he mowed the grass in parallel rows (see figure 1). The next week he mowed the same lawn in diagonal rows (see figure 2). The week following, he mowed the lawn in a spiral pattern (see figure 3). His mower cuts a strip about 26" wide.

Which mowing method required the least amount of walking?
Defend your solution mathematically.

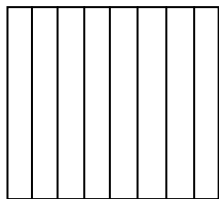


Figure 1

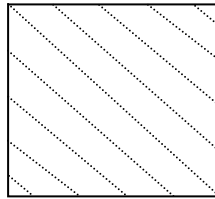


Figure 2

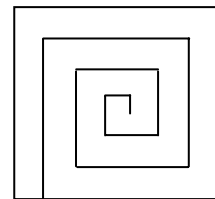


Figure 3

