$\qquad$ Date $\qquad$

## Mowing Areas



## Part 1

Directions: Find the area and perimeter for each lawn that Chad mowed. Show your work. Before you complete the computations, make some predictions.

- Which lawn do you think has the largest perimeter?
- Which lawn do you think has the largest area?

| Plot of Grass | Predicted <br> Perimeter <br> (feet) | Perimeter <br> (feet) | Predicted <br> Area <br> (square <br> feet) | Area <br> (square <br> feet) |
| :---: | :---: | :---: | :---: | :---: |
| A |  |  |  |  |
| B |  |  |  |  |
| C |  |  |  |  |
| D |  |  |  |  |

Now that you've done the calculations, were your predictions close?

Which two lawns tied for the largest area? Show the equations you used to find their areas.

Will lawn D have the same area and perimeter if it is changed to a regular 9-foot by 10-foot rectangle? Explain your answer.

## Part 2

Directions: Answer the questions. Show your work using equations. Remember to include the correct units in your answer.

1. Chad mowed all four lawns in one week. How many total square feet did Chad mow altogether? Show your work.
2. Chad mowed lawns A and C on the same day. Which lawn has a larger area? How much larger is it than the area of the other lawn? Show your work.
3. Which has the larger perimeter - lawn A or lawn D? How much larger? Show your work.

## Part 3

Directions: Chad hired you to help him mow someone's lawn. Draw a picture of the lawn that you mowed. Make sure to label the lengths of all sides of the lawn. In the space below, write equations to show how you found the area and perimeter of the lawn.

The lawn must meet the following specifications:

- The area is greater than 100 square feet but less than 250 square feet.
- The shape is irregular (not a square or rectangle.)

Scale: 1 box = 1 square foot

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

Show your work in the chart below.

| Lawn Mowed |  |
| :---: | :---: |
| Perimeter |  |
| (feet) |  |
| Area |  |
| (square feet) |  |

