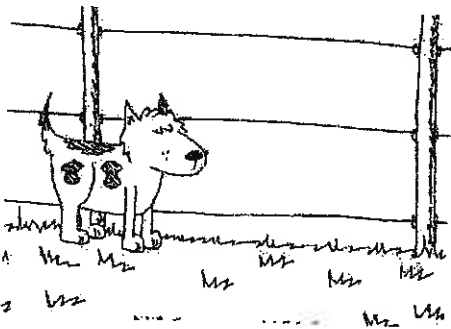


# POW #20

## DOG PEN

Design a rectangular dog pen that has the greatest possible area and keep within a budget of \$50. Your pen needs at least one gate for your dog. Fencing is \$1.00 per foot, fence posts are \$2.00 each, and gates (3 feet wide) are \$5.00 each.

What is the area of your pen?



In Process, include a drawing of your dog pen with dimensions (lengths) indicated on the sides.

### POW GUIDELINES

Number and label the 4 parts of your write-up.

1. *Complete heading.*

2. **Problem Statement.**

In your own words, tell what you are asked to do—include the essential details and the question.

3. **Process.**

Show all your work. Refer to the problem to give reasons for each step. Write enough (several paragraphs) to show that you really tried to solve the problem.

4. **Solution.**

Write your answer in a sentence which refers to the problem. Explain why your answer makes sense. Show a check if you can.

5. **Evaluation.**

Write complete sentences to answer these questions:

- How do you feel about this POW? Why?
- Did anyone help you?
- Does this remind you of any other problem?
- Tell one thing you learned.
- What rubric score should you get? Why?

**EXTENSIONS.** (Extensions are optional) If the POW is easy for you, try the extensions. Write a paragraph for each--the extensions do not require 4-part write-ups.

**FIRST EXTENSION:** What is the perimeter of your dog pen?

**SECOND EXTENSION:** Design a dog house that is appropriate for the size of dog that you choose. Draw a picture indicating the dimensions of the house and tell the size/kind of dog.