1. Explain how to get the area formula for a parallelogram in a way that a child would understand.



2. Explain how to get the area formula for a trapezoid in a way that a child would understand.



3. Section 10.2 Questions #30, 32, 34 and 36.

## **#30**

A pane of antique stained glass has dimensions of 30 centimeters x 58 centimeters. If the glass sells for 25 cents per square centimeter, what is the cost of the pane?

## #32

All-purpose carpeting costs \$27.50 per square meter. What is the cost of carpeting a room from wall to wall whose dimensions are 360 centimeters x 400 centimeters?

## #34

The length of a kitchen cupboard is 3.5 meters. There are three shelves in the cupboard, each 30 centimeters wide. How many rolls of shelf paper will be needed to cover these shelves if each roll is 30 centimeters x 3 meters?

## #36

Some humidity is necessary in homes for comfort, but too much can cause mold and peeling paint. Paint destroying moisture can come from walls, crawl spaces, and attics.

- a. An attic should have 900 square centimeters of ventilation for each 27 square meters of floor area. How many square centimeters of ventilation are needed for an attic with a 4-meter x 12-meter floor?
- b. A crawl space should have 900 square centimeters of ventilation for each 27 square meters of ceiling area, plus 1800 square centimeters for each 30 meters of perimeter around the crawl space. How many square centimeters of ventilation are needed for a 10-meter x 15-meter crawl space?