SCALE DRAWING OF FRONT OF HOUSE Scale: 1 cm= 2.5’



Scale drawing of side of house Scale: 1cm=2.5’

Side view area=\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Window area=\_\_\_\_\_\_\_\_\_\_\_\_\_

APPS IN SEQ MATH NAME\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

***SCALE, SURFACE AREA, AND EXTERIOR HOUSE PAINTING***

Many people choose not to own their own home. They prefer to rent an apartment or house. One reason for this decision is the cost of paying for repairs and improvements on a house. Homeowners must maintain the plumbing, electrical, heating, and landscape of their homes to retain its value.

One expense of home ownership is painting or siding a home. If you were to estimate the cost of either siding or painting the house, you would want to estimate the surface area of the house. Using the attached sketches, calculate the surface area and approximate the cost of materials.

## COST OF EXTERIOR HOUSE PAINTING

As a continuation of determining the amount of exterior paint needed to paint a particular home, this activity will incorporate the approximate cost of completing the job.

From our class calculations, answer the following to find the total paint area of the house:

1. What is the front/rear view siding only area? \_\_\_950\_\_\_\_\_\_ x2 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. What is the side view siding only area? \_\_756\_\_\_\_\_\_\_\_\_\_ x 2 = \_\_\_\_\_\_\_\_\_\_\_\_

3. What is the *total* siding area that will be painted? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

5. Using the internet advertisement from the home improvement store, how many gallons of paint will be needed for this job? How do you know this? *Valspar Duramax Exterior Primer and Paint is $39.98/gallon and covers 250 square feet.*

6. Based on the number of gallons you found in question #5, how much will the paint cost for this job?

7. What other materials would you have to have on hand to begin the project?

Measuring directions using scale:

1. Scale is 1cm=2.5’
2. For the gable area (triangular shape of house), measure the base in centimeters, then multiply that measure by 2.5 to find the measurement in feet. Measure the height of the gable in centimeters, then multiply that measure by 2.5 to find the height in feet. Use area of a triangle formula $\frac{(base\*height)}{2}$ to find gable area in SQUARE FEET.
3. For the wall area (rectangular part of house), measure the length in centimeters, then multiply that measure by 2.5 to find the measurement in feet. Measure the width of the wall in centimeters, then multiply that measure by 2.5 to find the width in feet. Use area of a rectangle formula (length \* width) to find wall area in SQUARE FEET.
4. Window area = 184 square feet
5. Door area=23 square feet
6. Siding (only) area=Total area-window area-door area=\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
7. Measure the length and width of the side view of house in centimeters, convert to feet.
8. Use area of rectangle to find side view area
9. Window area on side view=114 square feet
10. Siding area only of side view= Side view area-window area=