Name:____________________

Using the material price sheet provided, calculate the board footage or lineal feet and total material cost for each of the horizontal siding types. Use 2500 sq. ft. as the surface area to be covered.

Problem solutions as examples on pg. 2.

<table>
<thead>
<tr>
<th>Material</th>
<th>Nominal width</th>
<th>Lin or Bd ft.</th>
<th>$ per lin ft. or M bd ft.</th>
<th>Total $</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hardie plank</td>
<td>8 ¼” X 12’</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>cement composit</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bevel Cedar clear F.J</td>
<td>½ X 6”</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LP smart lap</td>
<td>8” X 12’</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Natural wood actual widths are typically ½” less than the nominal size.
(Example) ½” x 6” cedar nets at 5 ½”.
Code requires a minimum of 1" lap of horizontal siding.
Surface exposure for ½” x 6” cedar would be __________”.

Hardie plank and LP material widths and required minimum lap is given by the manufactures specs. = 1 ¼" lap.
Surface exposure for 8 ¼” Hardie lap siding would be __________”.

A buildings wall surface area sq. ft. is calculated by wall length x wall height.

**Calculate siding lineal feet needed per sq. ft. area.**

Determine the actual width of exposed coverage for the siding you are using.
Example, ½” x 6” cedar with a 1" lap the exposure = 4½" exposed surface. Divide 12" by 4½" = 2.66. This means it takes 2.66 lineal feet of this siding to cover one sq. ft. area.

**Example:** Use 2500 sq. ft. as the surface area to be covered.

Multiply 2.66 x 2500 sq ft. = 6650 lineal ft. of material needed. **A waste factor will need to be added each time you calculate building material!**
Board foot Conversion
Note: natural wood material less than (1") thick is calculated as (1") in bd. ft. conversions.

Use the previous lineal feet of 6650
Multiply 1 x 6 x 6650 lin. ft. then divide by 12 = 3325 board ft.
You may use the 1 x 6 factor of .5 x 6650 = 3325 board ft.

Material Costs
Divide the vendors cost per 1000 bd. ft. by 100 (or move the decimal three places left)
This = the cost per 1 sq. ft.
Example, If VG clear cedar cost is $ 1,330.00 per M ÷ 100, Solve by 3325 bd. ft. x
$ 1.330 = ($4,422.25) for the ½” X 6” VG clear bevel cedar siding. (No waste was calculated)

The above calculations not account for material waste!
Most siding contractors estimate 10% to 20% of the calculated material total to compensate for waste. Another method used is to not deduct for window and door openings when doing the square footage take off. The estimated waste must be added to the material cost.

There is not an exact procedure for calculating waste. Different houses of the same square feet will have different amounts of waste.
What are some external features of houses you think might affect the percent of waste material.

1. __________________________________________________________________
2. __________________________________________________________________
3. __________________________________________________________________

To calculate the complete total material cost for exterior siding you will need to determine all of the other materials necessary to complete the job, estimate them and add that amount to your siding total.

List as many materials other than siding that need to be estimated and added to the siding and waste cost to give the total package, siding material cost.

1. ______________________ 2. ______________________ 3. ______________________
4. ______________________ 5. ______________________ 6. ______________________
7. ______________________ 8. ______________________ 9. ______________________