## Chapter 2 Project- Creating an Invoice

Brian's Premium Siding specializes in cedar siding. Brian is working up a bid on a client's house. Brian computes the area of all walls to be sided and makes his calculations regardless of windows and doors. That is, he just uses the overall wall dimensions. This is the amount he will use as the square feet to be sided. However, he then adds $10 \%$ for waste. This gives him the amount of siding he will actually order.

Brian coats the cedar siding with a special sealer. 1 oz of sealer covers 1 sq-ft. Brian seals the siding after it is installed so he computes his sealer needs based on the original area without the $10 \%$ add-in.

Polk Lumber sells $A^{+}$Premium Cedar Siding in which they guarantee the quality of each piece (damaged planks may be exchanged). A $A^{+}$Premium retails for $\$ 1,115 / \mathrm{mbf}$ (thousand board feet). The sealer retails for $\$ 19.95 / \mathrm{gal}$ or $\$ 89$ for five gallons.

Polk provides a 9\% contractor's discount on the retail price. An additional 3\% cash discount is applied (to the amount due) if the bill is paid in cash. Brian expects to take advantage of both discounts.

Brian pays his employees $\$ 4.15 /$ sq-ft for the labor to install the siding and have it sealed.

Once Brian figures his retail cost, (materials + labor) he adds a $12 \%$ markup to cover his overhead and profit. This is what he will include in his customer bid sheet.

Brian must compute how much material to order, what to charge his clients and the average price per square foot for the job. He then presents the clients with his bid for the work.

## Building Dimensions:

35' 6" x 57' 6" with 11' "' $^{\prime \prime}$ walls.
Gable ends are $23^{\prime} 8^{\prime \prime}$ at the peak.


## Assignment

Determine Brian's Siding bid (Chapter Two Project) and present that bid as an invoice. A separate sheet(s) should be attached showing all your calculations in a neat and organized fashion in such a way that your supervisor could verify your work.
Your work will be graded on presentation, presentation, presentation, presentation completeness, accuracy, organization and punctuality. It will be graded using the rubric on the back. The rubric should be attached to your work when submitted.

## Guidelines

Your invoice must be typed or neatly hand-written and fit entirely on one side of one page.
You may use a copy of the blank invoice provided or make your own.
Your calculations page(s) must be neat, organized and easy to follow.
Your calculations page(s) must include all pertinent information reproduced in your own words/type.

Do NOT attach the Project Page from the text, rewrite the pertinent information.
Use headings and subheadings to identify each section of the calculation.
Identify each value with text. e.g Building Length $\qquad$ Building Width $\qquad$
A person not familiar with the Project should be able to follow all calculations. Use text for clarification.

Your calculations page(s) must contain at least one appropriately labeled diagram that helps clarify your work.
Include a separate bid sheet for presentation to the client containing:

- Area (sq-ft) to be Sided
- Amount of Sealer (quantity and size) to be Used
- Total Cost
- Final Cost per Square Foot

Presentation is important for the client's bid sheet. Ask yourself, "Would I hire this person based on this bid sheet?"

## Brian's Premimm Siding



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## Check List


$\square \quad$ Invoice has a professional appearance?
$\square$ Invoice contains required amounts?

- Calculations are neat and organized?

ㅁ Calculations page contains headings?

- Calculations seem realistic?
- Calculations seem realistic?

All pertinent information on calculations page?

- Clear/labeled diagram(s) enhance work?
$\square \quad$ Checked spelling?
$\square \quad$ Too much (not enough) calculator detail?
$\square$ Mom can understand work?
INVOICE- OVERALL FORMAT / PRESENTATION - Layout/Organization/Presentation

| 6 pts | Typed with clearly readable font or neatly handwritten. Uses clarifying headings. <br> Layout and information organization/presentation flows for easy readability. |  |  |
| :---: | :--- | :---: | :--- |
| 0 pts | Readability is significantly hindered by font type, handwriting, layout and/or information <br> presentation. |  |  |
| $\square$ | Appropriate use of Headings | $\square$ | Spelling / Grammar |
| $\square$ | Appropriate use of White Space | $\square$ | Appropriate for Audience |
| $\square$ | Easy on the Eyes / Overall <br> Readability | $\square$ | Fits Nicely on One Page |

## CALCULATIONS- OVERALL FORMAT / PRESENTATION -

Layout/Organization/Presentation

| 7 pts | Typed with clearly readable font or neatly handwritten. Uses clarifying headings. <br> Layout and information organization/presentation flows for easy readability. |  |  |
| :---: | :--- | :---: | :--- |
| 0 pts | Readability is significantly hindered by font type, handwriting, layout and/or information <br> presentation. |  |  |
| $\square$ | Clear Well Placed Diagram(s) | $\square$ | Appropriate Layout of Multiple Steps |
| $\square$ | Appropriate use of Headings | $\square$ | Spelling / Grammar |
| $\square$ | Appropriate use of White Space | $\square$ | Appropriate for Audience |
| $\square$ | Easy on the Eyes / Overall <br> Readability | $\square$ | Result(s) Easily Identified |

SOLUTION- ACCURACY / CORRECTNESS

| 7 pts | Processes/Strategies/Calculations used are easy to follow, accurate, complete and lead <br> to a correct solution. Charts/diagrams enhance the paper. |  |
| :---: | :--- | :--- |
| 0 pts | Processes/Strategies/Calculations used are not in General Terms or are so unclear or <br> contain substantial errors suggesting significant misunderstanding. The reader is now <br> bald and screaming. |  |
| $\square$ | Procedure is Valid | $\square$ |
| $\square$ | Procedure is Easy to Follow | $\square$ | Appropriate Calculation Detail | Diagram(s) Enhance Explanation |
| :---: |
| $\square$ |

