

The owner of a computer store is offering a discount on a computer sold in the store.

**Computer Sale!**

Original Price: \$598.00  
25% off original price

*8% tax applied after discount*

**34. Part A**

The owner offers a payment plan where the total cost of the computer is paid in 6 equal monthly payments.

- Determine the amount of each monthly payment.
- Show your work or explain your answer.

Enter the monthly payment and your work or explanation in the space provided.

**Part B**

A different computer is advertised as 40% off of the original price. After the discount, the tax is \$44.64.

- Determine the total price of this computer after the discount and tax are applied.
- Show your work or explain your answer.
- Determine the original price of this computer.
- Show your work or explain your answer.

Enter your answers and your work or explanations in the space provided.

**Unit 3 #34 Rubric Part A**

Score	Description
<b>2</b>	<p>Student response includes each of the following 2 elements:</p> <ul style="list-style-type: none"> <li>• Correct amount of each payment, \$80.73</li> <li>• Valid work shown or explanation given</li> </ul> <p>Sample Student Response:</p> <p>The discounted price is 75% of the original price, so I need to multiply the original price by 0.75. Then, I will multiply that amount by 0.08 to determine the sales tax. Adding the two together will give me the total price of the computer. I then divide the total price of the computer by 6 to determine the six monthly payments.</p> $\$598.00 \times 0.75 = \$448.50$ $\$448.50 \times 0.08 = \$35.88$ $\$448.50 + \$35.88 = \$484.38 \text{ total cost}$ $\$484.38 \div 6 = \$80.73 \text{ per month}$
<b>1</b>	Student response includes 1 of the 2 elements.
<b>0</b>	Student response is incorrect or irrelevant.

**Unit 3 #34 Rubric Part B**

Score	Description
<b>4</b>	<p>Student response includes each of the following 4 elements.</p> <ul style="list-style-type: none"> <li>• Correct total price of the different computer, \$602.64</li> <li>• Valid work or explanation given</li> <li>• Correct original price of the different computer, \$930.00</li> <li>• Valid work or explanation given</li> </ul> <p>Sample Student Response:</p> <p>The total cost of the different computer is \$602.64 and the original price is \$930.00.</p> <p>The tax is \$44.64, which is 8% of the sale price of the computer, <math>d</math>.</p> $\frac{44.64}{d} = \frac{8}{100}$ $4464 = 8d$ $d = 558.00$ <p>The price of the computer after discount and sales tax is \$602.64.</p> $558.00 + 44.64 = 602.64$ <p>The sale price is 60% of the original price, <math>p</math>.</p> $\frac{558.00}{p} = \frac{60}{100}$ $55800 = 60p$ $p = 930.00$