ANSWER KEY

Complete each word problem. Show your work and label your answers.

1. The state sales tax is 7 cents on every dollar spent. If Kai purchases construction materials totaling $135.00, how much sales tax will he pay?

<div align="center">**$9.45**</div>

2. Dr. Corey measures 350 ml of solution in a beaker. She then pours 23.4 ml of the solution into a test tube. How much solution remains in the beaker? `

<div align="center">**326.6 ml**</div>

3. A chef prepares a recipe that calls for sliced onions. She uses a total of 11.4 ounces of onions to prepare this dish for five people. How many ounces of onions will be included in each of the five servings?

<div align="center">**2.28 ounces**</div>

4. Lilliana is making homemade fudge. She places 1.2 pounds of dark chocolate and 0.86 pounds of white chocolate in a double boiler to melt. How much chocolate will she be using altogether?

<div align="center">**2.06 pounds**</div>

5. Russell walks 1.65 miles to meet his friend at the arcade. Russell and his friend then walk a third of this distance to go to the park. What is the total distance Russell walks to get to the park?

<div align="center">**2.2 miles**</div>

6. The Marx family has 4 gallons of gasoline in cans for their gas powered equipment. They will need 2.7 gallons to fill their ride-around lawn mower, 0.125 gallons to fill their large chain saw, 0.76 gallons to fill their pressure washer, and 0.21 gallons to fill their leaf blower. Do they have enough gasoline on hand to completely fill their equipment? Justify your answer by showing how much more they would need or how much they would have left over.

<div align="center">**They will have enough. There will be 0.205 gallons left after all equipment is filled.**</div>

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7. Miriam is purchasing a used car for $28,470.20. State sales tax on this purchase is 5 cents on every dollar spent. She will also need to pay an additional $227.48 in fees (not taxable) to the dealership. What is her total cost?

<p style="text-align:center">$30,121.19</p>

8. Alberto ran a total distance of 14.716 miles at a steady rate of 5.2 miles per hour. How long did it take him to complete this run?

<p style="text-align:center">2.83 hours</p>

9. A huge snowstorm drops 21 inches of snow on the town of Shadeboro. For every 3.5 inches of snow that falls, the Shadeboro snow removal crew must spend 5.65 hours plowing and clearing the town's roads. How long will the road crew spend clearing the snow after this massive storm?

<p style="text-align:center">33.9 hours</p>

10. A contractor measures the dimensions of a window so that weatherstripping can be placed all the way around the window. The window measures 13.5 inches by 11.22 inches, and the contractor has 3.9 feet of weather stripping on hand. Will this be enough to cover all the edges of the window? Justify your answer by showing how much more would be needed or how much would be left over.

The contractor will have enough. There will be 0.22 feet (2.64 inches) of weather stripping left over.

11. The local power company charges $0.193 per kilowatt-hour of electricity. If Jerry uses 310 kilowatt-hours on average each month, what is his average electricity cost per year?

<p style="text-align:center">$717.96 per year</p>

12. Bill spent $14.38 at the store. He bought one gallon of milk for $3 along with 2 pounds of cheese. If there was no sales tax, what was the cost per pound of cheese?

<p style="text-align:center">$5.69 per pound</p>