Possible Solutions

Carolyn went to the mall to buy a new outfit. She bought a pair of jeans for $32.50 and a shirt for $12.75. How much sales tax will she pay on her outfit if tax is 8.25%?

Possible Solution 1

1. Find the total price of the purchase.

$$\begin{array}{r} \$32.50 \\ +\ \ 12.75 \\ \hline \$45.25 \end{array}$$

2. Convert percentage of sales tax to decimal.

   8.25% → 0.0825

3. Multiply the sales tax rate by the total price.

$$\begin{array}{r} 45.25 \\ \times\ \ 0.0825 \\ \hline 3.733125 \end{array}$$

4. Round to 2 decimal places to represent currency.

   3.733125 → $3.73

Possible Solution 2

1. Find the total price of the purchase.

   $32.50

2. Find 8 $\underline{+\ \ 12.75}$ .25 using proportions.

   $45.25

$$\frac{8.25}{100} = \frac{x}{45.25}$$ Use cross products to solve

8.25 x 45.25 = 100x

373.3125 = 100x

$\dfrac{373.3125}{100} = \dfrac{100x}{100}$

3.733125 = x

3. Round to 2 decimal places to represent currency.

3.733125 → $3.73