

Using Mental Math to Solve Percent Applications

Name _____
Block _____ Date _____

Paying Sales Tax on Items

Sales tax varies from state to state. In Connecticut we pay 6.35% sales tax (not a "nice" number)

If sales tax is 4% we find 4% of the price to find the tax.

If we want the total price including tax we add the tax amount to the price or the total bill (if we buy more than one item)

If we want to find the tax rate (percent), we make the fraction $\frac{\text{amount of tax}}{\text{total cost}}$ and convert that fraction to a percent

<p>1) In a certain state, the sales tax is 5%. How much tax will you pay on an item that costs \$88 ?</p>	<p>2) Sara's shopping spree at a store came to a total of \$300. She must pay sales tax that is 6%. How much tax will she pay?</p>	<p>3) Dan paid \$24 for an item that included the tax. The cost without tax was \$20. What percent sales tax was he charged?</p>	<p>4) Find the total cost including sales tax of a \$20,000 car if the sales tax is 8%.</p>
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Sports and Grades and Miscellaneous

If we are given the percent and asked to find a part of something, make a ____% of ____ problem and use our mental math techniques to solve it.

Ex. Find how many redheads there are in a school of 300 students if 1% of the students are redheads.

Find 1% of 300

1% is $1/100$ so move the decimal point to the left 2 places and get 3 redheads.

If we need to find the percent, ask yourself what fraction is represented. Then convert the fraction to a percent.

Ex. There are 10 redheads in a school with 200 students. What percent does this represent?

Think..

$$\frac{\text{redheads}}{\text{all students}} = \frac{10}{200} = \frac{5}{100} = 5\%$$

1) A middle school team has a record of 8 wins and 2 losses. Find their win percentage.	2) 15 of the 25 students in block G math got an A on their last test. What percent does this represent?	3) 33 $1/3\%$ of the Easton family budget goes to their housing costs. If their budget for the month is \$3600, how much money will go to housing?	4) Tony made 18 of the 30 free throws he attempted in this month's games. What percent of his free throws did he make?
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