How much do we pay in property taxes for our house or boat?

Business Mathematics
Class notes
Property Tax (section 13.1)

Property tax is figured as a percentage of the assessed value of the object. The assessed value of a house, boat, or other taxable object is found by multiplying the fair market value by some percentage. The fair market value is the price a property would sell for.

expl 1: Find the assessed value of the property.

0

Fair market value: \$98,200

Rate of assessment: 42%

Find 42% of \$98,200.

42% 9 98,200

expl 2: One Harley Davidson store has property with a fair market value of \$518,600. The property is located in an area that is assessed at 35% of market value. The tax rate is \$7.35 per \$100 (of assessed value). Find the property tax.

assessed value = 0.35 * 518,600 = \$181,510

= 181,510 $= 181,510 \times 7.35$

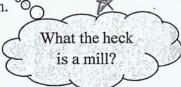
2 13,340.99

First, what is the assessed value?

What does "\$7.35 per \$100 (of assessed value)" mean?

Converting among Tax Formats:

As we will see, property tax is often given in different formats. We might be given a percentage, an amount of dollars per \$100 of assessed value, an amount of dollars per \$1,000 of assessed value, or even mills (per \$1 of assessed value). We will need to convert among forms and figure property taxes with them.



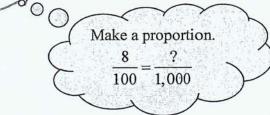
First, a mill is one-thousandth of a dollar. So 8 mills would be 8 of these \$0.001 - or rather \$0.008. That is 8 tenths of a cent! Let's play around with converting among the different formats you might see.

expl 3: Consider a tax of \$8 per \$100 of assessed value. Use percents and ratios to write their equivalent forms below.

XID

8 per 100 is 8/100

\$8 per \$100 of assessed value = \$_80 per \$1,000 of assessed value



expl 4a:) Consider a tax of 80 mills (per \$1 of assessed value). So, for every dollar of assessed value, how much tax is charged?

They will usually just say 80 mills.

So how much is 80 thousandths of a dollar?

expl 4b;) So for every \$1,000 of assessed value, how much tax is charged?

0.08 * 1000



. dvide expl 5: Write the given tax rate using the other three methods. Tax rate: \$6.75 per \$100 ° They leave off "of assessed value" often. a.) Write it as a percent. 6.75 = 6.75 % Do we use the percent sign, dollar sign, or no sign (for mills)? b.) Write the equivalent tax rate 67.5 per \$1,000". X10 6 \$6,75 per \$1000 2 x10 c.) Write the equivalent tax rate " 67.5 mills". Recall, \$80 per "one-Thousandths (one-Thousandths (of a dollar!!! I mill = 1000 € 0.001 \$1,000 was the same as 80 mills.

Worksheet: Finding property tax amounts with various rates:

This worksheet will help you practice finding the property tax for a house with an assessed value of \$100,000. You will use various formats.

Determining the Property Tax Rate:

How does a city (or taxing authority) figure how much to charge their citizens for property tax? Here is a simple process they might go through.

Step 1: Estimate the amount of money needed by the city or taxing authority.

Step 2: Find the total fair market value of all properties in the area.

Step 3: Find the total assessed value of all the properties.

Step 4: Calculate

Property tax rate =

Total tax amount needed

Total assessed value of properties

This will be a percent in decimal form.

expl 6: Find the tax rate. Write it as a percent, rounded to the nearest hundredth of a percent.

Total tax amount needed: \$28,630,000 Total assessed value: \$12,350,000,000

Proptax rate = 28630,000,000

What do you round to when you need to end up with the nearest hundredth of a percent?

≈ 0,00,23

= 23 hundredths of a percent

To summarize, complete the sentences.

So, in order for the municipality to make the required 28, 630,000, they should

charge a property tax rate of 0.23%. At this rate, the total assessed value of 12,350,000,000 will generate 28,405,000 in taxes.

0.23% of total lule = .0023* 12,350,000,000 we short?

Why are