

2.3 Linear Modeling

Name _____

1. Nacogdoches County has a property tax rate of 0.4 cents for each dollar of value for a given property. Given a property worth \$60,000, what is the tax?

2. Nacogdoches ISD (Independent School District) has a property tax rate of 1.4 cents for each dollar of value for a given property. If a Nacogdoches property's school tax is \$2040, what was the property appraised at?

3. If you homestead your house in Nacogdoches, they will reduce your home's appraised value by 20% before assessing county tax (0.4 cents per dollar), school tax (1.4 cents per dollar), and city tax (0.6 cents per dollar). If you have homesteaded your \$100,000 home in Nacogdoches, what is the total property tax you will owe?

On your own:

4. The U.S. newspaper circulation (in millions of papers) of Sunday papers is given by the following table. Plot the points and the model $C=0.5x+26.5$.

year	95	96	97	98	99	00	01	02
papers	61.5	60.8	60.5	60.1	59.9	59.4	59.1	58.8