

Replicate

9007610: 4.01, 4.03, 9.01, 9.02

Answers: (Insert hyperlinks to your saved files in these boxes.)

2.1	2.2
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Open a new MS Excel worksheet.

2.1 Sales Tax Table: State governments raise money by adding a sales tax to most transactions. Each state sets its own tax rate, causing a great deal of confusion for visitors. Make a sales tax table in Microsoft Excel for dollar vales \$1 to \$100 to make these conversions easier for travelers. Start with a blank sheet in Excel. When you finish, save your work as a Web page under H:EXCEL2-1.HTM and create a hyperlink to your work in the box labeled 3.2 above.

Column A: Counting 1 to 100.

1. Go to cell A4. Press **1** then press **ENTER**.
2. Press the down arrow to go to cell A5.
3. Type **=A4+1** then press **ENTER**. The number 2 should appear.
4. Copy A5 to cells A6 through A103.

Column B: Tax at 5.0%.

1. Go to cell B4.
2. Type **=a4*.05** then press **ENTER**.
4. Copy cell B4 to the cells B5 to B103.
7. Press **ENTER**.

Column C: Tax at 5.25%.

1. Go to cell C4.
2. Type **=A4*.0525** then press **ENTER**.
3. Copy this cell down.

Column D: Tax at 5.5%.

Do the same thing but the formula is **=A4*.055**.

Column E: tax at 5.75%.

Do the same thing but the formula is **=A4*.0575**.

Column F: Tax at 6.0%.

Do the same thing but the formula is **=A4*.06**.

Column G: tax at 6.25%.

Do the same thing but the formula is **=A4*.0625**.

Column H: Tax at 6.5%.

Do the same thing but the formula is **=A4*.065**.

2.2 Writing formulae: Use the example and the instructions that follow to make a loan table.

Refer to the example below

1. Type in the labels shown in the sample text. Be careful to type an apostrophe before each label to justify and force in numerics.
2. Type the number .1 in A1 and the number **1000** in A7.
3. Move to A8 and type in a formula which adds 1000 to the cell above. For cell A8 that formula would be **=A7+1000**.
4. Copy the formula in A8 to cells A9 through A60 using Ctrl c and Ctrl v.
5. The tax is computed by taking the unit cost and multiplying it by **.06**. For B7 the formula would be **=A7*.06**. Copy the tax down to **B60** the same way you copied the cost in column A.
6. The **DOWN PAYMENT** equals the UNIT COST times **.15**. The formula for C7 will be like the formula for B7 except **.06** needs to be replaced by **.15**. Copy these formulas down.
7. The **LOAN AMOUNT** will pay all money not paid by the DOWN PAYMENT or by the CLOSING COSTS. Subtract the DOWN PAYMENT in C7 from the UNIT COST in A7 and copy this formula down the D column.
8. **CLOSING POINTS** are a 3% charge added on to the LOAN AMOUNT to cover the bank's processing costs. Take the LOAN AMOUNT in column D and multiply it by **.03**.
9. **MONTHLY PAYMENTS** are calculated using the =PMT function. =PMT requires three pieces of information to calculate the monthly payment, the amount of the loan, the monthly interest rate and the number of months required to pay off the loan. Because our information is based upon yearly information, a few conversions will be needed. The formula for F7 will be :

=PMT(.1/12, 12*15, D7, 0, 0) where

D7 = LOAN AMOUNT

1./12 = a 10% annual INTEREST RATE monthly (10% times 12 months)

15*12 = the number of months required to pay off a 15 year loan (12 months x 15 years)

D7 = the amount of money borrowed

0 = the amount of money unpaid after this time, which is none.

0 = pay an the end of the month (one would be at the beginning of the month.)

10. Calculate **CLOSING COSTS** by adding B7 and E7.

To turn this work in:

1. Change A7 to **20000**.
2. Save the file, then save it again as a web page.
3. Make a hyper link to the page you saved in the box above.

Sample Text

	A	B	C	D	E	F	G
1	0.1	= Interest Rate					
2							
3			15%		3%		
4	Unit	6%	Down	Loan	Closing	Monthly	Close
5	Cost	Tax	Paymt	Amount	Points	Paymt	Cost
6							
7	1000	60	150	850	25.5	9.134143	85.5
8	2000	120	300	1700	51	18.26828	171
9	3000	180	450	2550	76.5	27.40243	256.5
10	4000	240	600	3400	102	36.53657	342
11	5000	300	750	4250	127.5	45.67071	427.5
12	6000	360	900	5100	153	54.80486	513
13	7000	420	1050	5950	178.5	63.93900	598.5
14	8000	480	1200	6800	204	73.07314	684
15	9000	540	1350	7650	229.5	82.20729	769.5
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51	45000	2700	6750	38250	1147.5	411.0364	3847.5
52	46000	2760	6900	39100	1173	420.1706	3933
53	47000	2820	7050	39950	1198.5	429.3047	4018.5
54	48000	2880	7200	40800	1224	438.4388	4104
55	49000	2940	7350	41650	1249.5	447.5730	4189.5
56	50000	3000	7500	42500	1275	456.7071	4275
57	51000	3060	7650	43350	1300.5	465.8413	4360.5
58	52000	3120	7800	44200	1326	474.9754	4446
59	53000	3180	7950	45050	1351.5	484.1096	4531.5
60	54000	3240	8100	45900	1377	493.2437	4617