

Chapter Review Problems

Unit 7.1 Gross pay: Wages and incentive plans

- The Fair Labor Standards Act applies to all employees. (T or F) **False; Some employees are exempt, including many managers and seasonal workers.**
- Some employers provide overtime pay that is superior to what the Fair Labor Standards Act requires. (T or F) **True**
- The employees of Sunshine Outdoor Products are paid time and a half after 40 hours per week. Compute each employee's gross pay.

Name	M	T	W	Th	F	S	Total hours	Regular hours	Overtime hours	Reg. rate per hour	Overtime rate	Regular pay	Overtime pay	Gross pay
Don Day	8	8	8	10	8	4.5	46.5	40	6.5	8.00	12.00	320.00	78.00	398.00
Joy Erb	8	8	8	8	8	8	48	40	8	8.25	12.375	330.00	99.00	429.00
Bo Hart	8	8	8	8	8	0	40	40	0	7.25	10.875	290.00	0.00	290.00
Thu Ho	8	8	8	10	4	0	38	38	0	8.25	12.375	313.50	0.00	313.50

- You and three classmates work for different companies. Your gross pay is \$1,295 a month. Betty earns \$640 semi-monthly, Brad earns \$310 a week, and Meg earns \$600 biweekly. Who has the greatest gross pay?

You:	$\$1,295 \times 12$	\$15,540.00
Betty:	$\$640 \times 24$	\$15,360.00
Brad:	$\$310 \times 52.14 \text{ weeks}$	\$16,163.40
Meg:	$\$600 \times 26.07 \text{ biweekly periods}$	\$15,642.00

- Jay Hirschi sold eight new cars during the week. If he earns \$150 per sale, what is his gross pay for the week?

$$8 \text{ cars} \times \$150 = \mathbf{\$1,200}$$

- Tom Judkins sews sleeping bags. He is paid \$5.50 per hour plus \$1.50 per sleeping bag. During the week, Tom worked 40 hours and sewed 32 sleeping bags. What is Tom's gross pay for the week?

Base salary:	$40 \text{ hours} \times \5.50	\$220.00
Piecework:	$32 \text{ sleeping bags} \times \1.50	+ 48.00
Gross pay		\$268.00

- Brock Snyder assembles chairs. During the pay period, Brock assembled 344 chairs. Determine his gross pay, based upon these piecework rates:

The first 100:	\$1.75 per chair	$100 \times \$1.75$	\$175
The next 100:	\$2.00 per chair	$100 \times \$2.00$	200
Thereafter:	\$2.25 per chair	$+144 \times \$2.25$	+324
		344	\$699

- Blanche Baker is a salesperson in a computer store and receives a \$1,200 semimonthly draw. Blanche is paid a 3% commission on net sales. During October, Blanche sold \$125,800 of merchandise; her share of sales returns was \$2,592. Calculate Blanche's commission payment for October.

$$\text{Net sales: } \$125,800 - \$2,592 \text{ returns} = \$123,208$$

Commission:	$\$123,208 \times 3\%$	\$3,696.24
Less draw:	$2 \text{ draws} \times \$1,200$	- 2,400.00
Commission still due		\$1,296.24

- Alfonso Gallegos is a salesperson for a furniture store. He is paid a semimonthly salary of \$800 plus 3% of monthly net sales over \$80,000. Alfonso's sales during November were \$128,300. His share of returns were \$3,400. Determine his gross pay for November.

Salary:	$2 \times \$800$	\$1,600
Commission:		
Net sales:	$\$128,300 - \$3,400$	\$124,900
Base amount		- 80,000
Overage	$\$44,900 \times 3\%$	+1,347
Total earnings		\$2,947

Unit 7.2 Payroll deductions for employees

10. Which statement is true?
- Social Security consists of (1) FICA and (2) Medicare.
 - FICA consists of (1) Social Security and (2) Medicare. **(b) is true.**
 - Medicare consists of (1) FICA and (2) Social Security.
11. The number of allowances claimed on Form W-4 must match the number of exemptions claimed on the federal income tax return. (T or F) **False**
12. American Pharmacy has three employees. Complete American's weekly payroll register. Use: **(a)** 2001 FICA tax rates, **(b)** the wage-bracket method shown in Illustrations 7-2 and 7-3, and **(c)** a 5% rate for withholding state income tax.

AMERICAN PHARMACY
Payroll Register
December 15, 2001

Employee	W-4 form	Prior YTD earnings	Gross pay this period	Gross pay this period subject to:		Deductions from employee's pay						Net pay	
				SS	MED	SS	MED	FIT	SIT	Other	Explain		Total
Dan Bevan	M-1	63,750	1,275	1,275	1,275	79.05	18.49	198.00	63.75	50.00	Savings	409.29	865.71
Ashlie Dobbs	S-1	14,580	810	810	810	50.22	11.75	133.00	40.50	X	X	235.47	574.53
Ian Rice	M-3	6,500	1,140	1,140	1,140	70.68	16.53	130.00	57.00	X	X	274.21	865.79
Totals	X	84,830	3,225	3,225	3,225	199.95	46.77	461.00	161.25	50.00	X	918.97	2,306.03

13. Refer to Problem 12. What amount of federal income tax would be withheld for Dan Bevan if American used the percentage method?

Step 1 Using Illustration 7-4, locate the weekly amount for 1 withholding allowance. Multiply by the number of allowances: $\$55.77 \times 1 \text{ allowance} = \55.77

Step 2 Subtract the result of Step 1 from Dan's gross pay: $\$1,275.00 - \$55.77 = \$1,219.23$

Step 3 Using Illustration 7-5, for married persons, find the range that includes the result of Step 2 (\$1,219.23). Use the range labeled "over \$960 but not over \$2,023." The amount to be withheld is \$125.40 plus 28% of the excess over \$960:

$$\begin{aligned}
 \text{Amount} &= \$125.40 + 28\%(\$1,219.23 - \$960.00) \\
 &= \$125.40 + 28\%(\$259.23) \\
 &= \$125.40 + \$72.58 \\
 &= \mathbf{\$197.98}
 \end{aligned}$$

↑
Notice that this is 2¢ less than the \$198 found in Problem 12, using the wage-bracket method.

14. FICA tax and federal income tax are the same thing. (T or F) **False**
15. Cliff Garton works for West Engineering Company. His gross pay for week 45 is \$1,800. Prior year-to-date earnings are \$79,200. Using 2001 FICA tax rates, determine how much Social Security tax and Medicare tax should be withheld from Cliff's pay.

Social Security:

Limit	\$80,400
Prior earnings	<u>- 79,200</u>
Amount subject to Social Security tax	\$ 1,200 × 6.2% = \$74.40

Medicare: $\$1,800 \times 1.45\% = \mathbf{\$26.10}$

Unit 7.3 Employer taxes and settling up with the IRS

16. Employers withhold FICA tax from employees' pay. Employers must pay matching amounts. (T or F) **True**
17. FUT and SUT are withheld from employees' pay. (T or F) **False. Unemployment tax is an expense of employers.**

For Problems 18–21, refer to Problem 12.

18. Determine American Pharmacy's share of Social Security tax. **\$199.95. American must pay a matching amount; because \$199.95 was withheld from employee's pay, American must pay an additional \$199.95 for Social Security.**
19. Determine American's share of Medicare tax. **\$46.77. American must pay a matching amount.**
20. Calculate American's FUT and SUT. Assume a SUT rate of 2.5% on the first \$15,000 paid each employee each year.

Employee	Prior YTD Earnings	Gross pay this period	Gross pay this pay period subject to	
			FUT	SUT
Dan Bevan	63,750	1,275	0	0
Tom Hess	14,580	810	0	420
Amy Salk	6,500	1,140	500	1,140
Total	X	3,225	500	1,560
Tax rates			$\times 0.8\%$	$\times 2.5\%$
Tax			\$4.00	\$39.00

21. American incurs these additional payroll expenses: (a) health insurance of \$100 per employee and (b) a contribution to employees' retirement plans at 8% of gross pay. What is American's total payroll expense for this pay period (including wages)?

Gross pay (from Problem 12)	\$3,225.00
Employer's share of Social Security tax (from Problem 18)	199.95
Employer's share of Medicare tax (from Problem 19)	46.77
FUT (from Problem 20)	4.00
SUT (from Problem 20)	39.00
Health insurance premiums: 3 employees \times \$100	300.00
Contribution to employees' retirement plans: $3,225 \times 8\%$	+ 258.00
Total payroll expenses	\$4,072.72

22. To avoid an underpayment penalty on federal income tax, a taxpayer can make estimated payments of sufficient amount. (T or F) **True**
23. Estimated payments are a guess, based on projected income and deductions. (T or F) **True**

For Problems 24–26, consider the tax situation of Lee Albert, a self-employed artist. Lee's 2001 net income is \$94,300.

24. Calculate Lee's self-employment FICA tax, to the nearest dollar.

Step 1 $\$94,300 \times 92.35\% = \$87,086$ (rounded)	
Step 2 FICA tax on first \$80,400: $\$80,400 \times 15.3\%$	\$12,301.20
FICA tax on remainder: $2.9\%(\$87,086 - \$80,400)$	+ 193.89
Total, rounded	\$12,495.00

25. When Lee prepares his 2001 federal income tax return, his federal income tax is figured at \$17,211 (not including self-employment FICA tax). What is Lee's total tax liability?

Federal income tax	\$17,211
Self-employment FICA tax (from Problem 24)	+ 12,495
Total tax liability	\$29,706

26. If Lee made quarterly estimated tax payments of \$8,000 per payment, calculate the dollar amount of refund or balance due.

Total tax liability (from Problem 25)	\$29,706
Amounts already paid to IRS: $4 \times \$8,000$	\$32,000
Lee has paid too much to the IRS; he will get a refund of \$2,294 ($\$32,000 - \$29,706$).	

Challenge problems

For Problems 27 and 28, consider the situation of Janele Stratton. Janele assembles tents. She is paid \$8.50 per hour plus \$2.50 per tent.

27. During the week, Janele worked 40 hours and completed 48 tents. What is her gross pay for the week?

Base salary: 40 hours × \$8.50	\$340.00
Piecework: 48 tents × \$2.50	<u>+120.00</u>
Gross pay	\$460.00

28. Calculate Janele's average hourly wage for the week.

$$\$460 \text{ gross pay} \div 40 \text{ hours} = \mathbf{\$11.50 \text{ per hour}}$$

For Problems 29–31, consider the paycheck of Taryn Olds, who works for National Technologies. Taryn earns \$1,225 each week. Her prior year-to-date earnings are \$6,125. She is married and claims 2 withholding allowances.

29. Calculate Taryn's payroll deductions for this pay period: (a) Social Security tax; (b) Medicare tax; (c) federal income tax (using the wage-bracket method); and (d) state income tax (figured as 6.5% of gross pay).

Social Security tax: $\$1,225 \times 6.2\% =$	\$75.95
Medicare tax: $\$1,225 \times 1.45\% =$	\$17.76
Federal income tax: \$168 (Illustration 7-3, "at least \$1,220 but less than \$1,230," 2 withholding allowances)	
State income tax: $\$1,225 \times 6.5\% =$	\$79.63

30. Taryn has National withhold \$75 each week for a savings plan. What is the amount of Taryn's paycheck?

Gross pay		\$1,225.00
Less deductions:		
Social Security tax	\$ 75.95	
Medicare tax	17.76	
Federal income tax	168.00	
State income tax	79.63	
Savings plan deduction	<u>+ 75.00</u>	
Total deductions		<u>- 416.34</u>
Net pay		\$ 808.66

31. Determine National's payroll expenses, as a result of Taryn's wages: (a) Social Security tax; (b) Medicare tax; (c) FUT; and (d) SUT (assume that National pays 2% on the first \$10,000).

Social security tax: Matching amount from Problem 29		\$75.95
Medicare tax: Matching amount from Problem 29		\$17.76
FUT:		
Limit:	\$7,000	
Prior year-to-date earnings	<u>-6,125</u>	
Amount subject to FUT	\$ 875 × 0.8%	\$ 7.00
SUT: $\$1,225 \times 2\%$		\$24.50

32. Galey and Connie Colosimo filed their 2001 income tax return in April 2002. They listed Galey's wages of \$38,000, Connie's business net income of \$53,000, and exemptions and deductions they were entitled to. Their federal income tax liability came to \$16,378 and Connie's self-employment FICA tax was \$7,489. Galey's employer withheld \$2,356 for Social Security; \$551 for Medicare; \$4,940 for federal income tax; and \$2,100 for state income tax. Galey and Connie paid quarterly estimates of \$4,500 per payment. Calculate their overpayment or underpayment.

Amounts owed to IRS		Amounts already paid to IRS	
Income tax liability	\$16,378	Federal income tax w/h Galey's pay	\$ 4,940
Connie's self-employment tax	<u>+ 7,489</u>	Estimated payments: 4 × \$4,500	<u>+18,000</u>
Total tax liability	\$23,867	Total already paid to IRS	\$22,940

Galey and Connie have not paid enough. **They owe an additional \$927** (\$23,867 - \$22,940).

Practice Test

1. Tan Ho is paid weekly at a rate of \$9.75 per hour. Calculate Tan's gross pay for the week, assuming he worked 44 hours and receives time and a half after the first 40 hours.

Overtime hours: $44 \text{ total hours} - 40 \text{ regular hours} = 4 \text{ overtime hours}$

Overtime rate: $\$9.75 \text{ regular rate} \times 1.5 = \14.625

Pay for regular hours: 40 hours × \$9.75	\$390.00
Pay for overtime: 4 hours × \$14.625	<u>+ 58.50</u>
Gross pay for week	\$448.50

2. You have two job offers: \$3,500 a month, and \$820 weekly. Which offer results in the greatest gross pay?

Monthly: $\$3,500 \times 12$	\$42,000.00
Weekly: $\$820 \times 52.14$	\$42,754.80

3. Geraldine Upton sews coats. She is paid \$7.50 per hour plus \$2.50 per coat. During the week, she worked 40 hours and sewed 63 coats. What is Geraldine's gross pay for the week?

Base salary: 40 hours × \$7.50	\$300.00
Piecework: 63 coats × \$2.50	<u>+157.50</u>
Gross pay	\$457.50

4. Gilbert Wilcox works for Gardner Engineering Company. Gilbert earns \$2,000 a week during 2001 and has prior year-to-date earnings of \$80,000. Using 2001 rates, what amount should Gardner withhold for FICA tax?

Social Security tax:		
Limit	\$80,400	
Prior earnings	<u>-80,000</u>	
Amount subject to Social Security tax	\$ 400 × 6.2%	\$24.80
Medicare tax: $\$2,000 \times 1.45\%$		<u>+29.00</u>
Total FICA tax		\$53.80

5. Irving Fox works for Green Landscaping Company. Irving's weekly gross pay during 2001 is \$800. Irving is single and claims 1 exemption. What amount of federal income tax should Green withhold, assuming Green uses the percentage method?

Step 1 Using Illustration 7-4, locate the weekly amount for 1 withholding allowance. Multiply by the number of allowances: $\$55.77 \times 1 \text{ allowance} = \55.77

Step 2 Subtract the result of step 1 from Irving's gross pay: $\$800.00 - 55.77 = \744.23

Step 3 Using Illustration 7-5, for single persons, find the range that includes the result of Step 2 (\$744.23). Use the range labeled "over \$552 but not over \$1,196." The amount to be withheld is \$75.15 plus 28% of the excess over \$552:

Amount = $\$75.15 + 28\%(\$744.23 - \$552.00)$
= $\$75.15 + 28\%(\$192.23)$
= $\$75.15 + \53.82
= \$128.97

6. Employers pay no FICA tax; they simply withhold FICA tax from employees' pay. (T or F) **False**
7. Mindy Lowe works for Founders Hospital. She is paid \$1,600 for the month of May 2001. Her prior year-to-date earnings are \$6,400. Calculate Founder's FUT on Mindy's pay.

Limit:	\$7,000
Prior earnings	<u>-6,400</u>
Amount subject to FUT	$\$ 600 \times 0.8\% = \4.80

8. Clint Perry is a self-employed accountant. Clint's net income during 2001 was \$105,200. Calculate Clint's 2001 self-employment FICA tax.

Step 1	$\$105,200 \times 92.35\% = \$97,152$ (rounded)	
Step 2	FICA tax on first \$80,400: $\$80,400 \times 15.3\%$	\$12,301.20
	FICA tax on remainder: $2.9\%(\$97,152 - \$80,400)$	<u>+ 485.81</u>
	Total, rounded	\$12,787.00

9. Terry and Margie Anderson filed their 2001 income tax return in March 2002. They listed Margie's wages, Terry's business net income, and exemptions and deductions they were entitled to. Their federal income tax liability came to \$13,280, and Terry's self-employment FICA tax was \$4,192. Margie's employer withheld \$1,860 for Social Security, \$435 for Medicare, \$7,970 for federal income tax, and \$1,625 for state income tax. Terry and Margie made quarterly estimates of \$2,500 per payment. Calculate their overpayment or underpayment.

Amounts owed to IRS		Amounts already paid to IRS	
Income tax liability	\$13,280	Federal income tax w/h Margie's pay	\$ 7,970
Terry's self-employment tax	<u>+ 4,192</u>	Estimated payments: $4 \times \$2,500$	<u>+10,000</u>
Total tax liability	\$17,472	Total already paid to IRS	\$17,970

Terry and Margie have paid too much. **They will get a refund of \$498** (\$17,970 - \$17,472).