

Math for Financial Literacy © 2013

Chapter 2: Understanding Your Paycheck—Checkpoint Solutions

Checkpoint 2.1

Use the tax tables shown in Figure 2-2 and 2-3 for the following exercises. Use 6.2% as the Social Security tax rate and 1.45% as the Medicare tax rate.

1. Thomas is a police dispatcher who earns \$709.62 per week. He is single and claims one withholding allowance. Determine his federal tax withholdings, Social Security tax, and Medicare tax.

Answer: federal tax withholdings: \$81
 Social Security tax: \$44
 Medicare tax: \$10.29

2. Britney is a private detective who earns \$905.77 per week. She is single and claims three withholding allowances. Determine her federal tax withholdings, Social Security tax, and Medicare tax.

Answer: federal tax withholdings: \$90
 Social Security tax: \$56.16
 Medicare tax: \$13.13

3. Jesus is an anthropologist who earns \$1,098.75 per week. He is married and claims three withholding allowances. Determine his federal tax withholdings, Social Security tax, and Medicare tax.

Answer: federal tax withholdings: \$93
 Social Security tax: \$68.12
 Medicare tax: \$15.93

4. Annika works as an optometrist. She earns \$4,447.92 semimonthly. She lives in a state with a flat-rate state income tax of 5.3%. Determine the amount of state income tax that is withheld from each of Annika's paychecks.

Answer: \$235.74

5. Aziz works as a bookkeeper and earns \$685 weekly. He is single, claims zero withholdings, and lives in a state with a flat-rate state income tax of 3.07%. Determine Aziz's net pay.

Answer: \$522.57

Checkpoint 2.2

1. Carmen is a diver for the local police department. She purchases health insurance and dental insurance for herself and her husband. Her total monthly premiums are \$478.63. Carmen's federal income tax rate is 15%. Determine Carmen's monthly tax savings by having her insurance premiums withheld before taxes are calculated.

Answer: \$71.79

2. Joaquin is a materials engineer. He purchases health, dental, and vision insurance through his employer. His monthly premiums are: \$78.55 for health insurance, \$24.17 for dental insurance, and \$18.85 for vision insurance. Joaquin's federal income tax rate is 28%. Determine his monthly tax savings by having his insurance premiums withheld before taxes are calculated.

Answer: \$34.04

3. Johanna is a watchmaker with a base annual salary of \$38,960. She receives a monthly travel allowance of \$85 because she travels between different stores that her employer owns. She also receives an annual stipend of \$500 because she recently completed an advanced certification course. Calculate the total annual value of Johanna's job.

Answer: \$40,480

4. Bernice is a meeting planner who earns an annual base salary of \$53,300. She receives a cell phone allowance of \$17.50 per month. Bernice also has her professional organization membership dues of \$8.35 per month deducted from her paycheck. What is the annual value of Bernice's job?

Answer: \$53,409.80

5. Tommy is an insurance claims adjuster who earns an annual base salary of \$60,200. He also receives a cell phone allowance of \$23 per month. Tommy must pay for parking at his office building, which costs \$68.50 per month. What is the annual value of Tommy's job?

Answer: \$59,654

Checkpoint 2.3

1. Javier is a short-order cook in a diner. He earns \$10.11 per hour. He works 80 hours per month and receives a monthly allowance of \$25 for his uniforms. His friend, Alexander, is also a short-order cook in a different diner. Alexander earns \$10.85 per hour and also works 80 hours per month. Alexander receives a monthly allowance of \$15 for his uniforms, but has to pay labor union dues of \$17.15 per month. Whose job has a higher annual value?

Answer: Alexander's job, with a net annual value of \$10,390.20

2. Olivia is a land surveyor who earns \$56,700 annually. She receives a monthly cell phone allowance of \$22.50. She spends about \$55 per month out of her own pocket for fuel to drive to different work sites. She has received a job offer for an office-based position as a survey analyst. It pays an annual base salary of \$62,370. However, she will need to join the municipal workers labor union with dues of \$11.55 per month. She will also have to pay \$45 per month to park in the city garage. Which job has the higher annual value?

Answer: Survey analyst, with a net annual value of \$61,691.40

3. Amir is a coal miner who earns \$21.94 per hour and works 40 hours per week. His recently negotiated labor contract will give him a 6.5% raise. How much more gross pay per week will Amir have after this raise?

Answer: \$57.04

4. Belinda works as a pharmacy technician in a nursing home. She earns \$14.10 per hour and works 40 hours per week. She just received a 4.75% raise. How much higher will Belinda's gross pay per week be because of this raise?

Answer: \$26.79

5. Nathaniel is an insurance underwriter. He earns \$31.45 per hour, is paid weekly, and works 40 hours per week. He is married and claims four withholding allowances. Nathaniel lives in a state with a flat-rate income tax of 5.3%. He will receive a 5.25% raise. Determine the change in Nathaniel's net pay per paycheck. Use the tax tables in Figure 2-2 and 2-3 to find the federal withholding.

Answer: \$46.45