Financial Algebra   Name: Key

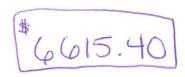6.4 to 6.5 Review   Date:

1. Miguel pays $47 semimonthly for health insurance which is 15% of the total cost.
    His employer pays the rest. What is the total cost to the nearest dollar of Miguel's
    health insurance?

    $313

2. Marcus earned $54,000 last year when the Social Security tax was 6.2% of income
    up to $94,200. His Medicare tax was 1.45%. How much did he pay in Social Security
    and Medicare taxes last year?

    $4131

3. This piecewise function represents the Social Security taxes for 2009. How much
    did Rachel pay in Social Security tax if she earned $106,700 in 2009?

    $$f(x) \begin{cases} 0.062x & \text{when } 0 < x \leq 106{,}800 \\ \$6{,}621.60 & \text{when } x > 106{,}800 \end{cases}$$
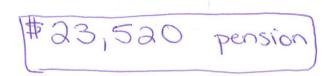
    $6615.40

4. When Lisa started at her current job, her employer gave her two days of paid vacation time with a promise of three additional paid vacation days for each year she remains with the company to a maximum of 4 work weeks of paid vacation.

   a. It has been 5 years since Lisa began working for this employer. How many paid vacation days has she earned?

   17 days

   b. When will she reach the maximum number of paid vacation days?

   6 years

5. Eddie is a plant manager at North Salem Construction Company. He has been employed there for 20 years and will be retiring at the end of this year. His pension is calculated on the average of his last four years salaries. In those years, he earned $82,000, $96,000, $105,000, and $109,000. His employer will give him 1.2% of that average for each year worked. Calculate Eddie's pension.

   $23,520 pension

6. In Rodger's state, unemployment compensation is calculated by finding the total of the quarterly wages of two consecutive quarters and dividing by 26. The weekly unemployment is 65% of that amount. In the quarter of January, February, and March, Rodger made a total of $13,950.80. In the quarter of April, May, and June, he made a total of $14,250.10. Find Rodger's weekly unemployment amount.

   $705.02 weekly