Area—Consumer and Family Resources
Problem—Calculating Commissions

Standards
SD FACS Standards
FCS 7.2.8
Investigate how individuals exchange work or resources for income to buy goods and services and pay taxes.

SD Mathematics Standards
9-12.A.2.1
Students are able to use algebraic properties to transform multi-step, single-variable, first-degree equations.

Problem

Some occupations are paid by hourly wage, some by salary, some by commission, and some by a combination of these. Jim and Joan have both been hired by two different companies. Jim has been hired at an hourly wage of $8.50. Joan has been hired at an hourly wage of $6.50, with a commission of 15% for any sales she makes over $100 each week.

What will you do?

Use this information to answer the following questions:

1. If both Jim and Joan work 40 hours a week, what is their gross income for one month (assuming four weeks in a month)?
   Jim's gross income: _____
   Joan's gross income:_____

2. In the first week this month, Joan sold $50 above her target of $100 sales. The second week, Joan sold $90 above her target sales. The third week, Joan didn't make any money above her target sale goal of $100. The fourth week, Joan sold $60 above her sale goal. What is Joan's commission for this month? What is her gross income for this month?
   Commission:_____
   Gross income:_____

3. How much in total sales above her target would Joan have to sell to equal Jim's gross income per month? Show your work and any formulas you create to solve this part of the problem.

What will you need?
Calculators (if desired)

How will you be evaluated?
Answer key

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