Area-Nutrition and Wellness
Problem-Calculating Calories

## Standards

## SD FACS Standards

FCS 6.3.2
Prepare nutritious and aesthetically pleasing foods that meet the health and wellness needs of family members based on available resources.

## SD Mathematics Standards

Math 9-12.A.2.1
Students are able to use algebraic properties to transform multi-step, singlevariable, first-degree equations.

## Problem

Calories come from carbohydrates, protein and fats found in foods. Per gram, carbohydrates and protein each provide 4 calories, while fat provides 9 calories.

Write an equation for finding what percent of your total calories come from fat if $X=$ grams of fat, $Y=$ grams of protein, and $Z=$ grams of carbohydrates

Equation:

Nutritionists recommend that no more than $30 \%$ of people's total calories per day come from fat. Use your equation to find what percent of the following diets comes from fat calories. Which diet(s) come meet nutritionists' recommendations?

Tom: 110 grams fat, 90 grams protein, 540 grams carbohydrates

Jenny: 65 grams fat, 60 grams protein, 350 grams carbohydrates

Lynn: 50 grams fat, 45 grams protein, 300 grams carbohydrates

## What will you need?

Problem
Calculators
How will you be evaluated?
Key with correct answers

