Area—Nutrition and Wellness **Problem**—Calculating Calories

Standards

<u>SD FACS Standards</u> FCS 6.3.2 Prepare nutritious and aesthetically pleasing foods that meet the health and wellness needs of family members based on available resources.

<u>SD Mathematics Standards</u> 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

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