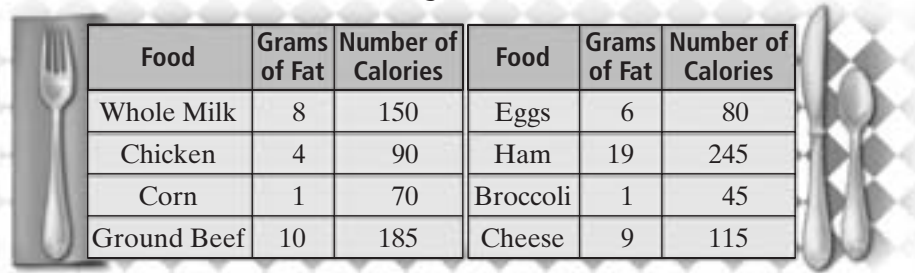# 4-2 • Guided Problem Solving

GPS **Exercise 17**

a. Find the domain and range of the relation between grams of fat and number of calories.

Calories Per Serving of Some Common Foods

Food	Grams of Fat	Number of Calories	Food	Grams of Fat	Number of Calories
Whole Milk	8	150	Eggs	6	80
Chicken	4	90	Ham	19	245
Corn	1	70	Broccoli	1	45
Ground Beef	10	185	Cheese	9	115

b. Make a graph of the relation.
c. Is the relation a function? Explain.

Read and Understand

1. What does x represent? What does y represent? _____

2. What are you asked to do? _____

Plan and Solve

3. Use the data in the table to list the ordered pairs. _____

4. What is the domain and range? _____

5. Using the ordered pairs, graph the points of the relation.

6. Use the vertical-line test to determine whether the relation is a function. Explain.

   _____

Look Back and Check

7. What is the definition of a function? _____

Solve Another Problem

8. a. Find the domain and range of the relation between temperature and sales of an ice cream shop.

Day	Temperature (°F)	Sales ($)	Day	Temperature (°F)	Sales ($)
Monday	72	250	Thursday	75	275
Tuesday	85	300	Friday	80	300
Wednesday	78	240	Saturday	88	490

b. Make a graph of the relation.
c. Is the relation a function? Explain.