

**Lesson 1-5****Example 1**

**SPORTS** Megan interviewed people living in her town about their favorite form of outdoor exercise. She recorded the data she obtained in this frequency table.

- a. How many people chose team sports over tennis?
- b. Which two activities together have the same frequency as team sports?

Favorite Outdoor Exercise		
Activity	Tally	Frequency
Walking/Hiking		8
Jogging/Running		6
Swimming		7
Tennis		4
Team Sports		15
Other		6
None		21

**Solution**

- a. Fifteen people chose team sports. Four people chose tennis.  $15 - 4 = 11$ , so 11 people chose team sports over tennis.
- b. Since  $15 = 8 + 7$ , as many people chose team sports as choose walking/hiking and swimming together.

**Example 2**

**Fund Raising** The members of a high school marching band sold pizzas as a fund raiser for new uniforms. The pictograph shows how many of each of 5 kinds of pizza were sold.

- Of the 5 kinds of pizza shown on the pictograph, which kind was most popular? How many of this kind of pizza were sold?
- How many veggie pizzas were sold?
- A special “band combo” pizza was also offered, and 39 of these pizzas were sold. How many pizza symbols are needed to represent this information on the pictograph?

Pizzas Sold	
Cheese	
Sausage	
Pepperoni and onion	
Hawaiian	
Veggie	

Key:  = 4 pizzas

**Solution**

- Cheese pizza was the most popular. Thirty-four cheese pizzas were sold.
- Twenty-nine veggie pizzas were sold.
- Since  $\frac{39}{4} = 9\frac{3}{4}$ ,  $9\frac{3}{4}$  pizza symbols are needed.

**Example 3**

**EDUCATION** The table shows the numbers of different courses offered by the academic departments in a high school.

Construct a pictograph for this data.

Courses Offered	
Department	Number of Courses
English	15
Foreign Languages	9
Mathematics	12
Science	10
Social Studies	22

**Solution**

To construct a pictograph, choose a symbol for the key. Then determine a value for the symbol. Let one symbol represent three courses. Draw the symbols to represent the data. (A partial symbol will be needed for values that are not multiples of three.) Label the pictograph with a title and key.

