

**Lesson 6-8****Problem**

**SPORTS** Below is a summary of the medals awarded to the five countries with the highest total medal count for the 2004 Olympics.

United States: 35 gold, 39 silver, 29 bronze

Russia: 27 gold, 27 silver, 38 bronze

China: 32 gold, 17 silver, 14 bronze

Australia: 17 gold, 16 silver, 16 bronze

Germany: 14 gold, 16 silver, 18 bronze

- a. Make a table to represent the number of medals of each type won by each of the five countries.
- b. For which of these five countries was the greatest percent of its medals gold?
- c. Of all the medals awarded to athletes from these five countries, what percent were gold?

**Solve the Problem**

- a. In the table, label the columns Gold, Silver, and Bronze, and the rows with the names of the 5 countries.

Country	Gold	Silver	Bronze
United States	35	39	29
Russia	27	27	38
China	32	17	14
Australia	17	16	16
Germany	14	16	18

- b. Calculate the total number of medals won by each country and then the percent of those medals that were gold.

United States: Total =  $35 + 39 + 29 = 103$

$$\text{Percent gold} = \frac{35}{103} \square 0.3398 \text{ or } 33.98\%$$

Russia: Total =  $27 + 27 + 38 = 92$

$$\text{Percent gold} = \frac{27}{92} \square 0.2935 \text{ or } 29.35\%$$

China: Total =  $32 + 17 + 14 = 63$

$$\text{Percent gold} = \frac{32}{63} \square 0.5079 \text{ or } 50.79\%$$

Australia: Total =  $17 + 16 + 16 = 49$

$$\text{Percent gold} = \frac{17}{49} \square 0.3469 \text{ or } 34.69\%$$

Germany: Total =  $14 + 16 + 18 = 48$

$$\text{Percent gold} = \frac{14}{48} \square 0.2917 \text{ or } 29.17\%$$

China had the greatest percent of its medals that were gold.

- c. The total number of medals for all five countries was  $103 + 92 + 63 + 49 + 48 = 355$ . The total number of gold medals for all five countries was  $35 + 27 + 32 + 17 + 14 = 125$ . So the percent of medals awarded to athletes from these five countries, the percent that were gold was  $\frac{125}{355}$  or about 35%.