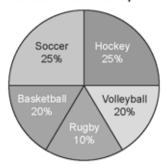
# **Chapter 1 Warm-Up**

## Section 1.1

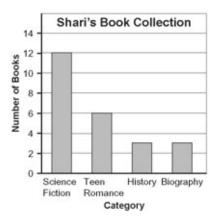
1. What type of graph is this?

Grade 8 Favourite Sports



Use the graph in #1 to answer #2 and #3.

- **2.** What percent of students prefer volleyball?
- 3. How popular is hockey?
- 4. What type of graph is this?



**5.** How many books does the graph in #4 show that Shari has?

### **Mental Math**

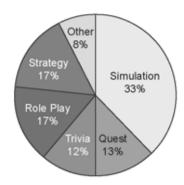
- **6.** You want to show  $\frac{3}{12}$  on a circle graph. What fraction of the circle graph do you colour?
- **7.** You want to show  $\frac{4}{8}$  on a circle graph. How many degrees do you need for your sector angle?
- **8.** Count by 5s from 30 to 60.
- 9. Count by 20s from 0 to 200.
- **10.** Count by 25s from 100 to 300.



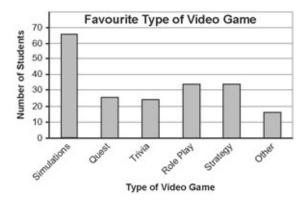
#### Section 1.2

**1.** What information does this graph provide?

Favourite Type of Video Game (200 students)



**2.** What information does this graph show?



- **3.** How many people prefer role-play games? Which graph shows this more clearly? Explain why.
- **4.** Would a line graph be a useful way to show the data? Explain why or why not.
- **5.** What other type of graph could be used to display the data?

#### **Mental Math**

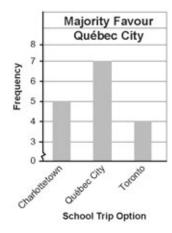
- **6.** On a pictograph, each soccer ball represents 10 players. How many players are represented by 2.5 soccer balls?
- **7.** On a pictograph, each pair of ice skates represents 15 skaters. How many skaters are represented by 4 pairs of ice skates?
- **8.** On a pictograph, each ice cream cone represents 5 ice creams sold. How many ice creams do you need to show that you have sold
  - a) 35 ice creams?
  - **b)** 42 ice creams?
- **9.** You want to show 25% on a circle graph. How many degrees do you need for your sector?
- **10.** You want to show 75% on a circle graph. How many degrees do you need for your sector?



# Section 1.3

Use the graph in #1 to answer #2 to #5.

**1.** According to the graph, how many people prefer each trip destination?



- 2. From the graph, what can you conclude about the number of people who prefer Québec City? How has the graph been distorted to give this impression?
- **3.** Redraw the graph to show the information accurately.
- **4.** What would be a more accurate conclusion about student preferences?
- **5.** What other type of graph could be used to display the data? Explain your preference.

#### **Mental Math**

**6.** Alan wants to draw a pictograph using these symbols to represent ten people who prefer either soccer or basketball. What recommendations do you have for Alan?





- **7.** In most cases, what number should the *y*-axis start with? Explain why.
- **8.** Draw the symbol you would use to show a break in the *y*-axis.
- **9.** On a pictograph about lunch choices, a chef used a pizza to represent 5 sales and a hamburger to represent 10 sales. What suggestion do you have for the chef?
- **10.** You want to show 50% on a circle graph. How many degrees do you need for your sector?