# Chapter 2 Warm-Up

# Section 2.1

- 1. What kind of graph is this?
  - Favourite Types of Video Games

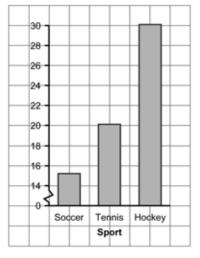


 A librarian kept track of the number of fiction and non-fiction books taken out of the library.

Type of Book	Frequency
Fiction	1250
Non-fiction	5000

- **a)** Sketch a graph you could use to display this data.
- **b)** Justify your choice.
- **3.** Use an organizer to compare a bar graph and a pictograph.
- 4. a) What does this symbol mean when it is on a graph?
  - **b)** When might you use it?

5. How could this graph be misleading?

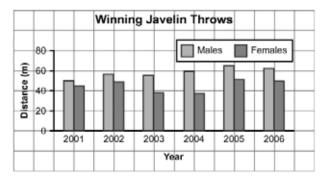


## **Mental Math**

- **6.** You want to show  $\frac{25}{50}$  on a circle graph. What fraction of the circle graph do you colour?
- **7.** You want to show  $\frac{80}{160}$  on a circle graph. How many degrees do you need for your sector angle?
- **8.** You want to show  $\frac{16}{48}$  on a circle graph. What fraction of the circle graph do you colour?
- **9.** You want to show  $\frac{24}{32}$  on a circle graph. How many degrees do you need for your sector angle?
- **10.** You want to show  $\frac{16}{40}$  on a circle graph. How many degrees do you need for your sector angle?

# Section 2.2

1. What kind of graph is this?



**2.** How can the format of a graph be distorted?

Use this visual to answer #3 to #5.



**3.** What is a two-term ratio of stars to circles?

- **4.** What shapes are represented by the ratio 4 : 5?
- **5.** Write the three-term ratio comparing the stars, circles, and diamonds.

#### Mental Math

- **6.** You want to show  $\frac{5}{25}$  on a circle graph. What fraction of the circle graph do you colour?
- **7.** You want to show  $\frac{7}{28}$  on a circle graph. How many degrees do you need for your sector angle?

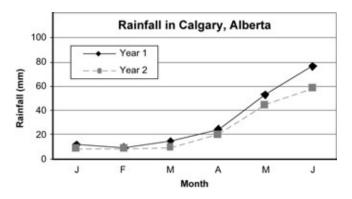
*For #8 to #10, express the ratio as a fraction, a decimal, and a percent.* 

8. 5:40
9. 9:12
10. 14:28

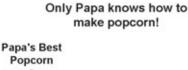


## Section 2.3

1. What kind of graph is this?



**2.** The graph in this advertisement shows the results of a taste test.







- **a)** Which brand of popcorn seems to be the most popular? Explain.
- **b)** How is the graph misleading?
- c) How should the graph be redrawn to represent the data more accurately?

- **3.** Javier ran 600 m in 2 min. What is the unit rate?
- **4.** Sesame butter costs \$5.49 for 750 g or \$1.99 for 250 g.
  - a) Estimate the cost per 100 g for each jar.
  - **b)** Calculate the better buy.
- **5.** It takes you 10 min to keyboard one quarter of your 1000-word essay.
  - a) Determine the unit rate.
  - **b)** At this rate, how much could you type in 15 min?

#### **Mental Math**

 One brand of pasta costs \$0.99 for 700 g. Another brand costs \$1.29 for 1250 g. Estimate the better buy.

*For #7 to #10, mentally estimate the unit rate. Show your thinking.* 

- **7.** Chris runs 200 m in 30 s.
- **8.** A brand of dog food is priced 3 cans for \$4.99.
- 9. Jess earns \$75 for 7 hours work.
- 10. Juice costs \$2.75 for 946 mL.