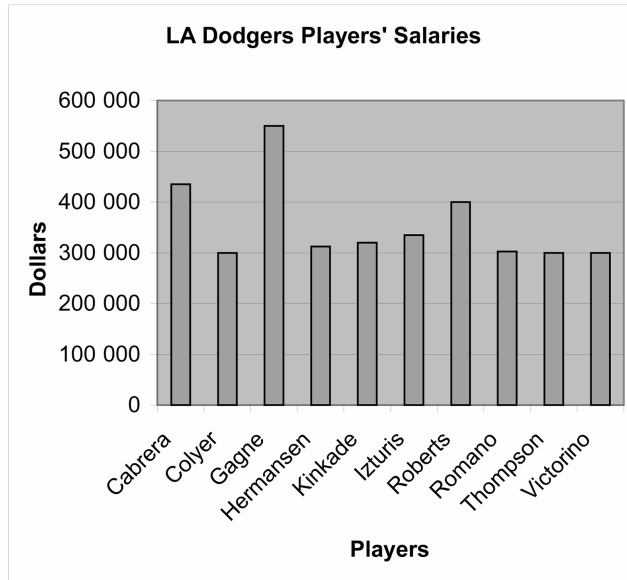


Lesson 1: Interpreting Data

1. This graph shows 10 LA Dodgers with the least salary.



- Whose salary is the least?
- Which players earn between \$300 000 and \$400 000?
- Write 2 other questions that can be answered from the data.
Answer the question.
- Mota's salary is \$675 000. How would you add Mota to the graph? Explain using numbers, pictures, or words.

Extra Practice 2

Lesson 2: Exploring Mean

- Calculate the mean for each data set below.
Round each answer to the nearest whole number.
 - 2, 4, 7, 4, 8, 9, 12
 - 24, 34, 44, 31
 - 1, 2, 3, 4, 5, 6, 7, 8, 9
 - 4, 8, 12, 16, 20, 24
- This table shows the statistics for 7 players on the Bobville Baseball Buzzards.

Name	Games Played	Hits	Strikeouts
Green	104	129	90
Brown	107	129	60
White	89	71	62
Black	39	17	7
Rose	23	17	11
Silver	22	11	10
Gold	17	17	10

- Calculate the mean for each of the following:
 - Games Played
 - Hits
 - StrikeoutsRound each answer to the nearest whole number.
- Who do you think is the best player by looking at the statistics?
Explain.
- Predict what would happen to the mean number of Games Played if Green and Brown were not included in the data.
Check your prediction.

Extra Practice 3**Lesson 3: Drawing Stem-and-Leaf Plots**

1. Here are the Math marks of the students in Ms. Gupta's class.

70	81	79	80	60
93	59	73	84	74
82	79	69	82	77
64	78	83	85	68
75	83	75	79	83

- a) What was the lowest mark?
The highest mark?
- b) Group the data and display them in a stem-and-leaf plot.
- c) What is the range of the data?
- d) What is the mean mark?
- e) What does the shape of the leaves tell you?

Lesson 4: Drawing Double-Bar Graphs

1. This table shows the favourite juices of some students.

Favourite Juices

Juice	Number of Boys	Number of Girls
Orange	9	6
Apple	14	12
Grape	7	14
Cranberry	6	4

- How many students were surveyed?
- Draw a double-bar graph to display these data.
- Make comparisons between the data sets.

Extra Practice 5**Lesson 5: Line Graphs**

1. This table shows the number of Canadians that booked trips with Toby's Travel to the Yukon, Northwest Territories, and Nunavut.

Year	Number of Canadians
1998	183
1999	88
2000	141
2001	68
2002	113

- a) Draw a line graph to display these data.
b) What is happening to the number of Canadians who take these trips with Toby's Travel each year?
c) Which year had 28 more visitors than the year 2002?
2. Below is a record of how many ice cream cones were sold in a week at Ice Cream Haven.

Day	Number of Cones
Sunday	240
Monday	65
Tuesday	65
Wednesday	80
Thursday	100
Friday	155
Saturday	160

- a) Draw a line graph to display the data.
b) When does Ice Cream Haven sell the most ice cream cones? Why do you think this is so? Explain.
c) Write 2 things you can learn from your graph.

Lesson 6: Reaching Conclusions Through Data Collection

1. This table shows the number of minutes George and Benito chatted online in December.

Minutes Per Chat

5	11	23	15	25
20	18	32	15	22
8	31	23	21	16
30	10	28	12	35

- a) Choose an appropriate way to display this data.
Explain your choice.
- b) Display the data.
- c) What conclusion can you draw from the display?
2. This tally chart shows the results of a survey of Grade 5 students.

Favourite Ice-Cream Flavours

Flavour	Tally
Chocolate	
Strawberry	
Bubblegum	
Vanilla	
Maple Walnut	

- a) How many students were surveyed?
- b) Display the data in a graph.
- c) What conclusions can you draw from the graph?

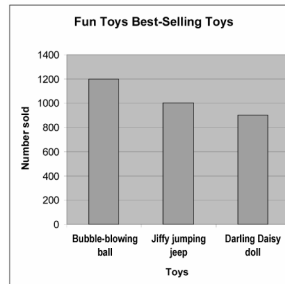
Master 5.25

Extra Practice 7

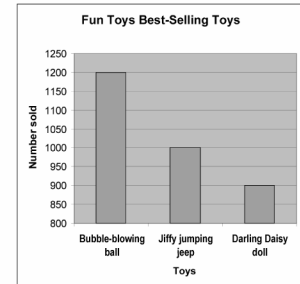
Lesson 7: Bias in Displaying Data

1. The Fun Toy Company displays their 3 top-selling toys on two different graphs.

Graph A



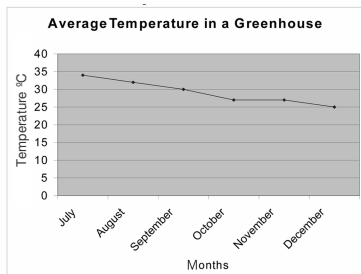
Graph B



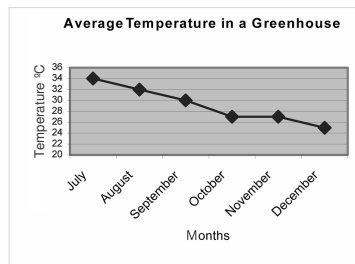
- a) How are the two graphs alike?
How are they different?
- b) Look at Graph A.
Does there appear to be much difference between the numbers of each toy sold?
- c) Look at Graph B. Does there appear to be much difference between the numbers of each toy sold?
- d) In Graph B, the bar for the bubble-blowing ball is greater than the other two bars combined. Can you say that more bubble-blowing balls were sold than the other two toys together? Explain.
- e) Suppose you were advertising the bubble-blowing ball.
Which graph would you use? Explain.

2. These two graphs display average temperatures in a greenhouse.

Graph A



Graph B



- a) Look at Graph A. What happens to the temperature from July to December?
- b) Do Graph A and Graph B show the same data?
How do you know? Explain.
- c) Suppose you wanted to sell new greenhouses.
Which graph would you show possible customers and what argument would you make so they would buy a new greenhouse?

Master 5.26

Extra Practice Answers

Lesson 1 – Master 5.19

1. a) Colyer, Romano, Thompson, and Victorino
- b) Hermansen, Kinkade, Izturis, and Romano
- c) Which players make over \$400 000?
(*Cabrera and Gagne*)
About how much more money does Roberts make than Colyer? (*About \$100 000*)
- d) I would keep the vertical scale the same, but extend the maximum value to 700 000. I would add a bar for Mota. Mota's bar would be between the 600 000 and 700 000 lines, but closer to 700 000.

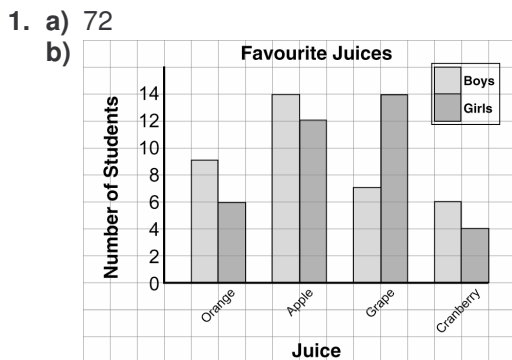
Lesson 2 – Master 5.20

1. a) 7 b) 33 c) 5 d) 14
2. a) 57, 56, 36
- b) Brown; he has the most hits and has fewer strikeouts than Green.
- c) I predict the mean number of games played will decrease if Green and Brown are not included in the data.
 $(89 + 39 + 23 + 22 + 17) \div 5 = 190 \div 5 = 38$

Lesson 3 – Master 5.21

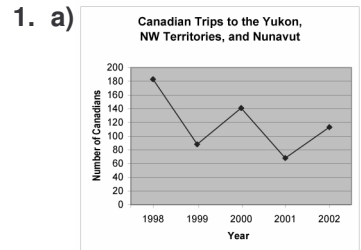
1. a) Lowest: 59; highest: 93
 - b) Math Marks
- | Stem | Leaf |
|------|---------------------|
| 5 | 9 |
| 6 | 0 4 8 9 |
| 7 | 0 3 4 5 5 7 8 9 9 9 |
| 8 | 0 1 2 2 3 3 3 4 5 |
| 9 | 3 |
- c) 34
 - d) About 77
 - e) Most of the marks were in the 70s and 80s.

Lesson 4 – Master 5.22

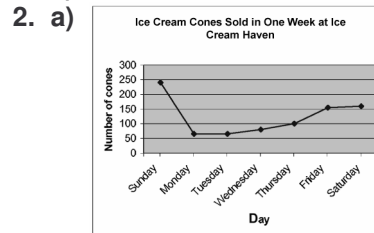


- c) More boys than girls like orange, apple, and cranberry juice. Twice as many girls as boys like grape juice.

Lesson 5 – Master 5.23



- b) The number is going down and up alternately, and is generally decreasing.
- c) 2000



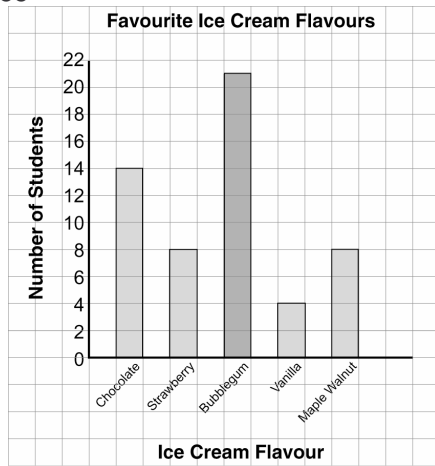
- b) Ice Cream Haven sells the most ice cream on Sunday, perhaps because people are out visiting or doing activities.
- c) There is a drop in sales from Sunday to Monday. Sales increase through the week.

Lesson 6 – Master 5.24

1. a) I chose a stem-and-leaf plot because there are a lot of numbers and they can be grouped.
 - b) Minutes Per Chat
- | Stem | Leaf |
|------|---------------|
| 0 | 5 8 |
| 1 | 0 1 2 5 5 6 8 |
| 2 | 0 1 2 3 3 5 8 |
| 3 | 0 1 2 5 |
- c) Most of George's and Benito's online chats lasted between 10 and 28 minutes.

2. a) 55

b)



c) More students like bubblegum ice-cream than the other flavours. Equal numbers of students like strawberry and maple walnut. Vanilla is the least favourite.

Lesson 7 – Master 5.25

- a) The graphs are alike because they have the same title, labels, and bar names. They are different because they have different scales.

b) No c) Yes

d) No. There were 1200 bubble-blowing balls, 1000 jiffy jumping jeeps, and 900 darling Daisy dolls sold. 1200 is not more than 1900.

e) I would use Graph B, because it makes the bubble-blowing ball seem more popular than it really is.
- a) The temperature is decreasing.

b) Yes, they show the same data. I can tell the average temperatures are the same: July 34°, August 32°, September 30°, October 27°, November 27°, and December 25°.

c) I would show them Graph A, because it emphasizes that the greenhouse stays warm in the winter; also, the decrease in temperature does not appear to be as great.