

Chapter 2
Lesson 4

Rounding Numbers

You will need

- number lines



GOAL

Round numbers to the nearest hundred thousand, the nearest ten thousand, and the nearest thousand.

The welcome sign at the left could have been put up after the 2006 Canadian Census.

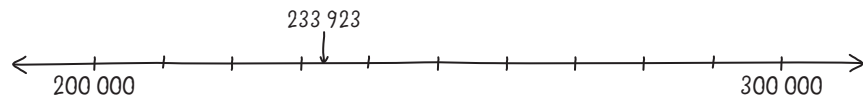


What other ways can you use to show the population of Saskatoon?



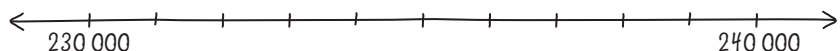
Rachel's Rounding

I don't think the population of Saskatoon stays at exactly 233 923. I think an estimate should have been used on the sign. 233 923 is between 200 000 and 300 000.

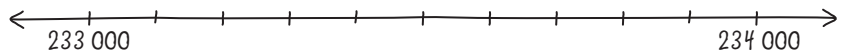


The sign could say "Population: 200 000."

- Rachel estimated by rounding 233 923 to the nearest hundred thousand. How do you know that 200 000 is the nearest hundred thousand?
- Round the population to the nearest ten thousand.



- C. Round the population of Saskatoon to the nearest thousand.



Reflecting

- D. The number 233 923 was rounded to the nearest hundred thousand, the nearest ten thousand, and the nearest thousand. For each rounding, was the number rounded up or down? Why?
- E. Which rounded number would you use on the sign? Why?

Checking

1. a) Round the population of each city in the chart below to the nearest hundred thousand, the nearest ten thousand, and the nearest thousand.

Populations of Three Cities in British Columbia

City	Population in 2006
Victoria	330 088
Kelowna	162 276
Abbotsford	159 020

- b) Which two populations round to the same hundred thousand? Do they round to the same ten thousand and to the same thousand?

Practising

2. Canada's saltwater shoreline is 202 080 km long. Round this number to the nearest hundred thousand, ten thousand, and thousand.



3. Vasco looked up the total land and fresh water area of each Western province.

Land and Fresh Water Areas of Western Provinces

Province	Land and fresh water (km ²)
British Columbia	944 735
Alberta	661 848
Saskatchewan	651 036
Manitoba	647 797

- a) Round each area to the nearest hundred thousand, ten thousand, and thousand.
- b) Which provinces have the same area, to the nearest hundred thousand?
- c) Which provinces have the same area, to the nearest ten thousand?
4. The population of Regina in 2006, rounded to the nearest ten thousand, was 190 000.
- a) Do you think the population was more likely to have been 186 521 or 176 521? Explain.
- b) What is the least the population could have been? What is the greatest the population could have been?
- c) Suppose the population of Regina had been reported to be about 200 000, instead of 190 000. What is the least the population could have been then? What is the greatest the population could have been?
5. Sean rounded a number to the nearest hundred thousand and got 0. What number could he have rounded? Explain.
6. Anna rounded a five-digit number to the nearest ten thousand and got 60 000. List 10 numbers that she could have rounded.

