Chapter 1: Whole numbers

1A PLACE VALUE

The **place** of a digit in a number determines its value.

The digit **zero** or 0 is used to show an empty place value.

1 Write down the value of the digit 4 in:

a 45

b 964

c 5407

d 64 291

e 48 302

2 For the number 417 302, write down the value of the:

a 3 **b** 1 **c** 7

d 4 **e** 2 **f** 0

3 Write in numeral form:

a $300 + 70 + 8$

b $50\,000 + 600 + 20 + 3$

c $900\,000 + 20\,000 + 5000 + 40 + 1$

4 Write in expanded form:

a 542

b 20 317

c 315 060

5 Write in words:

a 220

b 6415

c 37 803

6 Write in numeral form:

a three thousand and twenty two

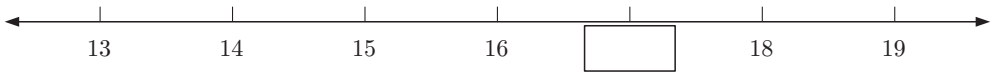
b ninety eight thousand, four hundred and one

1B NUMBER LINES

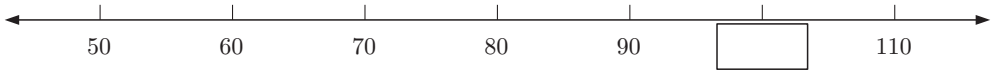
A **number line** has equally spaced points marked with numbers in order and in the correct position relative to one another. Arrowheads are used to show that the line can continue indefinitely.

1 Find the missing value(s) in each number line:

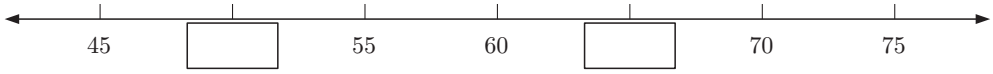
a



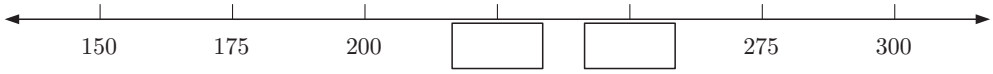
b



c



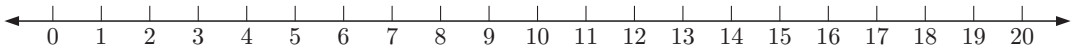
d



$>$ means "**is greater than**".

$<$ means "**is less than**".

2



Using this number line to help you, insert $<$ or $>$ to make each statement correct:

a $5 \square 1$ **b** $4 \square 7$ **c** $9 \square 12$ **d** $20 \square 14$

3 Show the numbers $31, 26, 25, 29, 33$ on a number line. Hence write the numbers in ascending order.

4 Show the numbers $250, 150, 200, 350, 50$ on a number line. Hence write the numbers in descending order.