1.7 Use of Grade 1 indicators

· • • • · · · · · · · · · · · · · · · ·	grade 1 symbol indicator
· • • • · · · · · · · · · · · · · · · ·	grade 1 word indicator
· • • • · · · · · · · · · · · · · · · ·	grade 1 passage indicator
· • • • · · · · · · · · · · · · · · · ·	grade 1 passage terminator
	grade 1 passage indicator on a line of its own
	grade 1 passage terminator on a line of its own

1.7.1 Grade 1 indicators will not be needed for simple arithmetic problems involving numbers, operation signs, numerical fractions and mixed numbers.

Evaluate the following: $3 - 2\frac{1}{2} =$

1.7.2 Simple algebraic equations which include letters but no fraction or superscript indicators may need grade 1 symbol indicators where letters stand alone or follow numbers. (See <u>Section 1.2</u> for the underlying rules and <u>Section 3.2</u> for more examples.)

y = x+4c

1.7.3 More complex algebraic equations are best enclosed in grade 1 passage indicators. This will ensure that isolated letters and indicators such as superscript, subscript, fractions, radicals, arrows and shapes are well defined without the need for grade 1 symbol indicators.

Consider the following equation: $3x-4y+y^2 = x^2$

Note that this particular equation could also be written

because the left hand side of the equation is in grade 1 mode following the numeric indicator (see <u>Section 1.2</u>).

Similarly

$$\frac{x^2 + 2x}{1 + x^2} = 1$$

(fraction: x squared plus 2x all over 1 + x squared close fraction) can be safely written as

but could also be written

See <u>Section 11.5</u> for more examples of the use of grade 1 passage indicators.

1.7.4 If a complex algebraic expression does not include a comparison sign (such as an equals sign) then it is unlikely to include interior spaces in braille (see <u>Section 1.1.2</u>). In this case a grade 1 word indicator will be enough to ensure that superscript, subscript, fractions, radicals, arrows and shape indicators are well defined without the need for grade 1 symbol indicators.

Evaluate $\sqrt{(y-x^2)}$.

See <u>Section 7.3</u> for more examples of the use of grade 1 word indicators.

1.7.5 When entire worked examples or sets of exercises are enclosed in grade 1 passage indicators, the grade 1 indicators can be preceded by the "use indicator" and placed on a line of their own.

Solve the following quadratic equations:

1.7.6 When only a few contracted words are involved, the grade 1 passage indicator can be used to enclose entire worked examples and sets of exercises. In this situation any words occurring in the exercises will be written in uncontracted braille and isolated letters will not need letter signs. Where there is more text involved it is better to stay in grade 2 and use grade 1 passage, word or symbol indicators only as required.

1.7.7 In the examples in this document, grade 2 mode is assumed to be in effect, and grade 1 indicators have been included according to the guidelines in this section. Minimising the number of indicators must be balanced against reducing clutter within the expression itself. A grade 1 symbol indicator which occurs half way through an expression may be more disruptive to the reader than a word or passage indicator, even if these take up more cells. It is also important to use a consistent approach when transcribing a particular text. Overall the focus should be on mathematical clarity for the reader.

Further guidance will be given when more feedback has been received from students.