Inequalities

14 The box below contains three mathematical symbols.

=	<	>

From the box, choose a symbol to make each of the following statements correct.

(i) $\frac{5}{8}$ ..... $\frac{2}{8}$

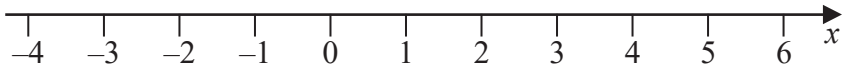
(1)

(ii) -2×-3 ..... $-3 + 9$

(1)

(Total for Question 14 is 2 marks)

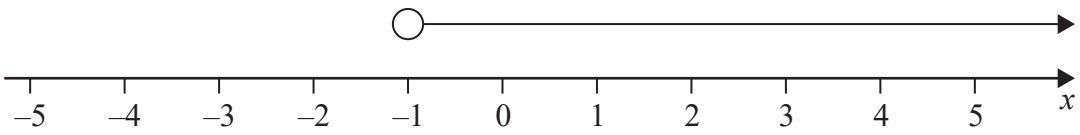
19 (b) On the number line below, show the set of values of x for which $-2 < x \leqslant 4$



(2)

(Total for Question 19 is 4 marks)

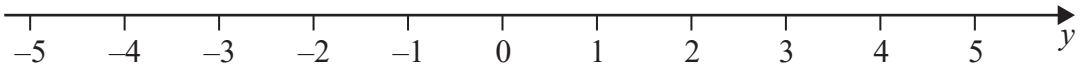
21 (a) Write down the inequality shown on this number line.



.....

(1)

(b) On the number line below, show the inequality $-3 \leqslant y < 4$

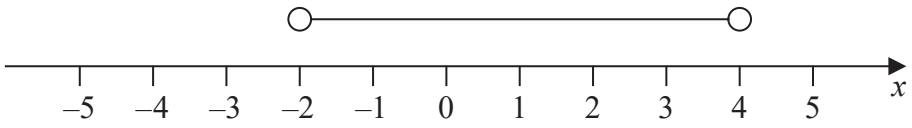


(2)

(Total for Question 21 is 3 marks)

23 Jenna is asked to show the inequality $-3 < x \leqslant 4$ on a number line.

Here is her answer.



(a) Write down two mistakes Jenna has made.

1 .....

.....

2 .....

.....

(2)

(b) Work out the greatest integer that satisfies the inequality

$$5y - 7 < 16$$

.....

(2)

(Total for Question 23 is 4 marks)

23 $-2 \leqslant n < 5$

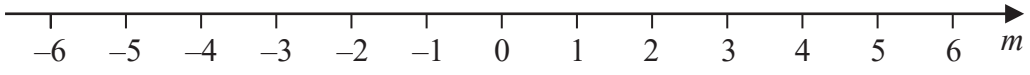
n is an integer.

(a) Write down the greatest possible value of n.

.....

(1)

(b) On the number line below, show the inequality $-4 \leqslant m < 1$



(2)

(c) Solve $\frac{2}{5}g - 4 < 6$

.....

(3)

(Total for Question 23 is 6 marks)

23 Solve $7x - 27 < 8$

.....

(Total for Question 23 is 2 marks)

23 (c) Solve $\frac{5x}{2} > 7$

.....

(2)

26 (a) Solve $\frac{5x}{2} + 3 > 18$

.....

(3)

28 Solve $x + 11 \leqslant 5 - \frac{1}{2}x$

.....

(Total for Question 28 is 3 marks)