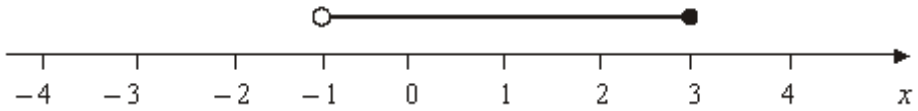
**Q1.** $-3 \leq n < 2$

$n$ is an integer.

(a) Write down all the possible values of $n$.

.....

**(2)**




(b) Write down the inequalities represented on the number line.

.....

**(2)**
**(Total 4 marks)**

**Q2.** $-2 \leq \times < 3$

$x$ is an integer.

Write down all the possible values of $x$.

.....

**(Total 2 marks)**

**Q3.** $-2 < n \leq 4$

$n$ is an integer.

(a) Write down all the possible values of $n$.

.....

**(2)**

(b) Solve the inequality $6x - 3 < 9$

.....

**(2)**

**(Total 4 marks)**

**M1.**

| | Working | Answer | Mark | Additional Guidance |
|---|---|---|---|---|
| (a) | | –3, –2, –1, 0, 1 | 2 | **B2** for –3, –2,–1, 0, 1<br>(B1 for –2, –1, 0, 1 or –2, –1, 0, 1, 2) |
| (b) | | $-1 < x \leq 3$ | 2 | **B2** for $-1 < x \leq 3$<br>(B1 for $-1 \leq x \leq 3$ or $-1 < x < 3$ |
| | | | | **Total for Question: 4 marks** |

**M2.**

| Answer | Mark | Additional Guidance |
|---|---|---|
| –2, –1, 0, 1, 2 | 2 | **B2** for –2, –1, 0, 1, 2 cao<br>(**B1** for 4 correct<br>or for 4 correct and one incorrect<br>or for 5 correct and one incorrect) |
| | | **Total for Question: 2 marks** |

**M3.**

| | Working | Answer | Mark | Additional Guidance |
|---|---|---|---|---|

| | | | | |
|---|---|---|---|---|
| (a) | | –1, 0, 1, 2, 3, 4 | 2 | **B2** cao<br>(**B1** for at least 5 correct and not more than one incorrect integer) |
| (b) | $6x < 9 + 3$ | $x < 2$ | 2 | **M1** for correctly separating $x$ and non $x$ terms or for dividing both sides by 6 [condone use of =, >, ≤, or ≥]<br>**A1** for $x < 2$, accept $x < \frac{12}{6}$<br>[SC: **B1** for $x = 2$ with no working. But 2 on the answer line with no working gets no marks] |
| **Total for Question: 4 marks** | | | | |

**E2.** **Foundation**

The term 'integer' appeared to be generally understood and many candidates gained at least one mark. The most common error made by those who understood the question was to omit –2 from the list.

**Higher**

This question was done well. Most candidates were able to give the integer values of $x$ within the range. Common errors were to either to omit an integer (usually 0 or –2) or to add an extra integer (usually 3).

**E3.** Most candidates were able to score at least one mark in part (a) for quoting 5 correct possible integer values of *n* in the given inequality; the omission of zero or the inclusion of –2 were the usual errors made. In part (b), candidates were less successful, many totally ignoring the inequality and giving $x = 2$ as their answer; this was awarded one mark, for evidence of some correct algebraic manipulation. Some candidates quoted the correct answer $x < 2$ and then gave examples of possible values of $x$. This extra working was ignored and full marks were awarded.