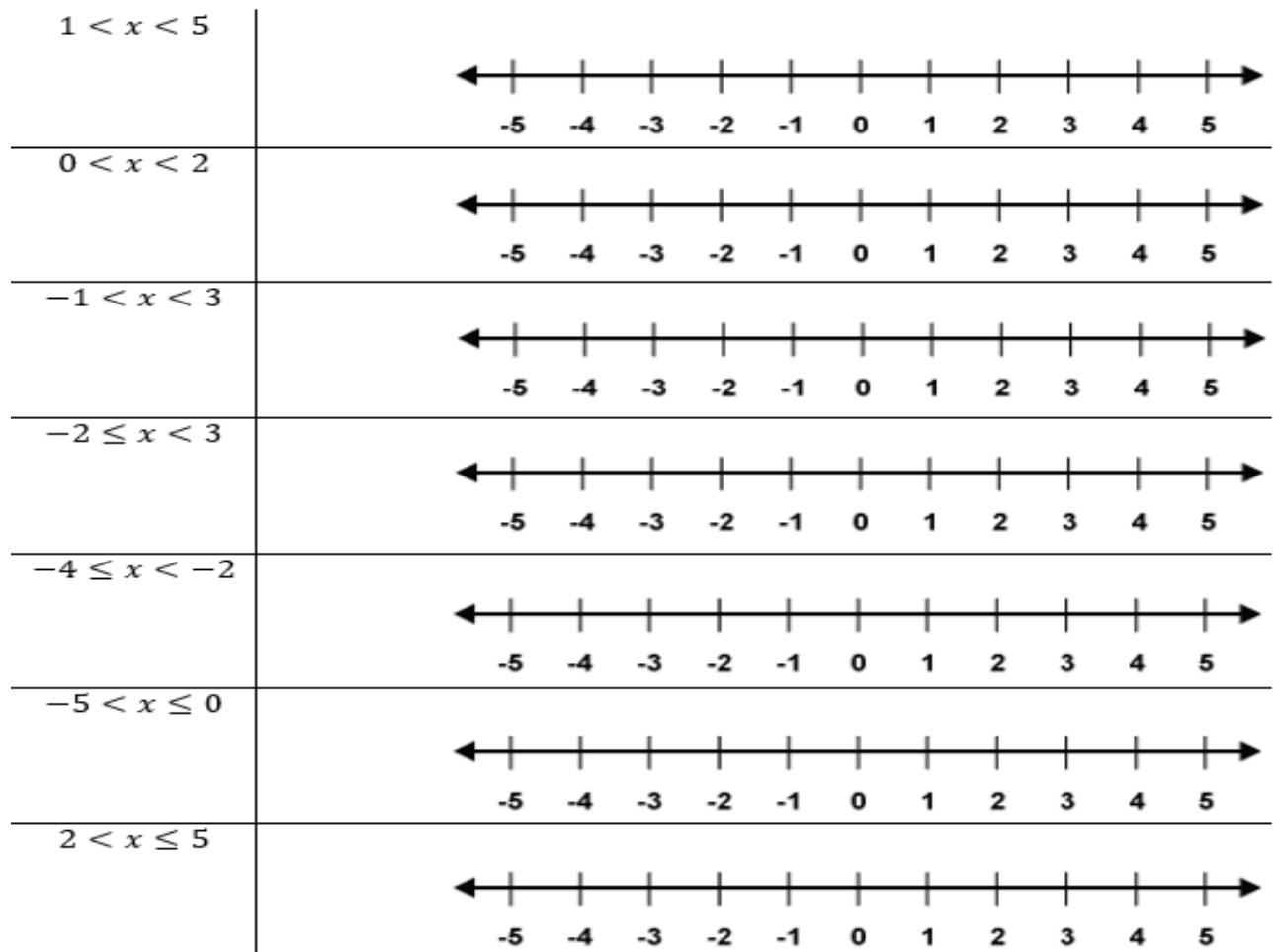


MUST

Mark the following inequalities on the number lines:



Represent the following inequalities on a number line (you can draw these in your books)

- $0 < x < 9$
- $50 \leq x \leq 51$
- $-\frac{1}{2} \leq x < 0$
- $0.5 \leq x < \frac{9}{10}$

In your books, solve these inequalities and represent your solution on a number line

SHOULD

1. $x - 3 \leq 4$
2. $x + 7 > 9$
3. $2x - 3 < 5$
4. $3x + 4 \leq 7$
5. $3x - 4 \leq 8$
6. $3x - 6 \geq x + 2$
7. $4x + 2 < 3$
8. $6x + 11 \leq 18 - x$
9. $2x + 5 \leq 4x + 10$

COULD

1. To hire a bus, the charge is £60 plus £2 a mile. The bus company will only hire the bus if they take at least £225.
 - a) Let the number of miles be x . Write down an inequality for x and solve it.
 - b) What is the smallest distance the bus can be hired to go?
2. Ali has 40 metres of fencing, in 1 metre lengths that cannot be split. He wants to use as much of it as he can to enclose a rectangle that is twice as long as it is wide.
 - a) Call the width of the rectangle x metres and write down an inequality
 - b) Solve it to find the length and width of the biggest rectangle that he can make.

Answers for should and could section. The answers are NOT in the correct order

$$x \leq 4$$

$$x \leq 1$$

$$x < 4$$

$$x \geq 82.5$$

$$x < \frac{1}{4}$$

$$x \leq 7$$

$$x \geq -\frac{5}{2}$$

$$x > 2$$

$$x \leq 6.6$$

$$x \leq 1$$