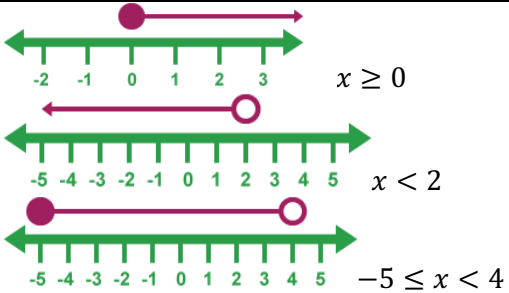


KS3 Unit 22 Inequalities

Topic/Skill	Definition/Tips	Example
1. Inequality	An inequality says that two values are not equal . $a \neq b$ means that a is not equal to b.	$7 \neq 3$ $x \neq 0$
2. Inequality symbols	$x > 2$ means x is greater than 2 $x < 3$ means x is less than 3 $x \geq 1$ means x is greater than or equal to 1 $x \leq 6$ means x is less than or equal to 6	State the integers that satisfy $-2 < x \leq 4$. -1, 0, 1, 2, 3, 4
3. Inequalities on a Number Line	Inequalities can be shown on a number line. Open circles are used for numbers that are less than or greater than (< or >) Closed circles are used for numbers that are less than or equal or greater than or equal (\leq or \geq)	
4. Graphical Inequalities	Inequalities can be represented on a coordinate grid. If the inequality is strict ($x > 2$) then use a dotted line . If the inequality is not strict ($x \leq 6$) then use a solid line . Shade the region which satisfies all the inequalities.	Shade the region that satisfies: $y > 2x$, $x > 1$ and $y \leq 3$ 