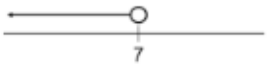
Key words and symbols: what I need to say and write accurately

Word or symbol	Explanation
$>$	is greater than
$<$	is less than
$\geq$	is greater than or equal to
$\leq$	is less than or equal to
equation	a statement that two quantities have equal value, e.g. $5 + 2 = 10 - 3$
Inequality	a statement that two quantities do not have equal value, e.g. $5 + 2 < 12 + 1$
comparative inequality	an inequality that compares two values, e.g. $4 > 1$ or $x > 8$ or $1 \leq x$
restrictive inequality	a 'double' inequality that puts an upper and lower limit on a number, e.g. $5 \leq x < 10$

Phrases meaning 'less than'

$x < 7$

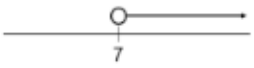


any number which is...

less than 7
up to (but not including) 7
up to (and excluding) 7

Phrases meaning 'greater than'

$x > 7$

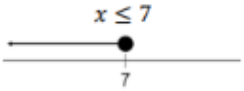


any number which is...

greater than 7
exceeding 7

Phrases meaning 'less than or equal to'

$x \leq 7$

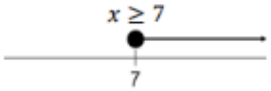


any number which is...

less than or equal to 7
at most 7
no greater/more than 7
up to (and including) 7

Phrases meaning 'greater than or equal to'

$x \geq 7$



any number which is...

greater than or equal to 7
at least 7
no less than 7

Fingertip facts: what I need to learn by heart

Inequalities can be read in both directions.
These two statements mean the same thing.

$5 > 3$ $\qquad$ $3 < 5$

read this way → *5 is greater than 3* $\qquad$ *read this way* ← *5 is greater than 3*

read this way ← *3 is less than 5* $\qquad$ *read this way* → *3 is less than 5*

If we multiply or divide an inequality by a negative number, the direction of the sign reverses due to the rotating effect of multiplication by negatives.

If $-x > 2$,
then $x < -2$

