

## SOLVING INEQUATIONS:

The various strategies that we typically use to solve exponential and logarithmic equations remain the same, only that the symbol is not an equal sign (=).

Inequations use the following four symbols:

$>$  -greater than

$<$  -less than

$\geq$  -greater than or equal to

$\leq$  -less than or equal to

### 7.1 WORKED EXAMPLE

Give exact solutions to these inequations:

1.  $2^x > 16$

2.  $2^x \leq 2$

3.  $2^x \geq \frac{1}{2}$

### 7.2 WORKED EXAMPLE

Give exact solutions to these inequations:

(hint – change to index form)

1.  $\log_2 x < 5$

2.  $\log_{10} x > 3$

3.  $\log_5 x \geq 0$