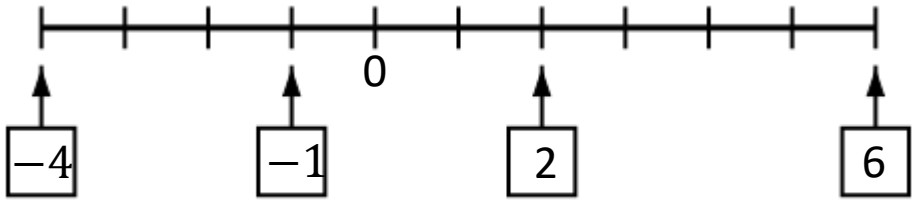
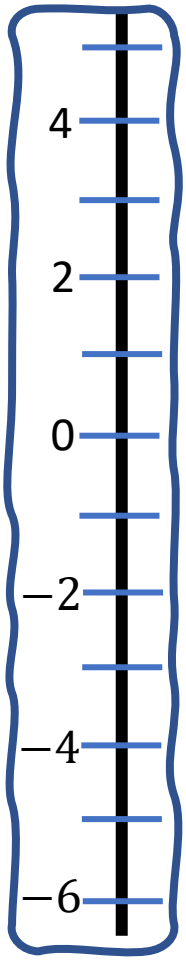
Y7L U5 Positive and Negative Numbers: Knowledge Organiser

The size (maginitude) of a number is the how far the number is from **zero**
e.g. (+11)=11 is eleven above zero, (- 4) is four below zero.
Because the sign gives the direction from zero they are also called **directed numbers**

The number line and the order of positive and negative integers



The ascending order of the numbers 0, -4, 2, 6, -1 is -4, -1, 0, 2, 6



Inequality notation can be used to compare numbers

$(-7) > (-11)$	$12 > 8$
$(-12) < 7$	$(-20) < (-3)$

Multiply a negative integer and a positive integer

$(-5) \times 2$	$8 \times (-10)$
$= (-10)$	$= -80$

Add or subtract a positive number to or from a negative augend or minuend

$(-9) + 5$	$(-7) - 10$
$= (-4)$	$= (-17)$

Multiply and divide using two negative numbers

$(-5) \times (-2)$	$(-18) \div (-6)$
$= 10$	$= 3$
$(-0.5) \times (-2)$	$(-1.8) \div (-6)$
$= 1$	$= 0.3$

Add or subtract using a negative addend or subtrahend

$(11) + (-5)$	$(2) - (-13)$
$= 6$	$= 15$
$(-8) + (-5)$	$(-12) - (-3)$
$= (-13)$	$= (-9)$

Hegarty

Order and compare positive and negative integers	37
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