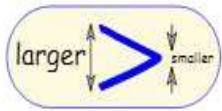


Y7 Maths

Block 1 - Number Sense

Equality and Inequality



$=$ equal
 \neq not equal

$>$ greater than
 $<$ less than
 \geq greater than or equal
 \leq less than or equal

Positive Integers
are whole numbers greater than zero

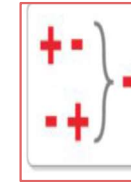
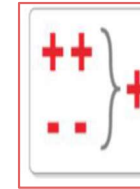
Negative Integers
are whole numbers less than zero

Place Value

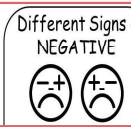
Ten Thousands	Thousands	Hundreds	Tens	Ones	Tenths	Hundredths	Thousandths	Ten Thousandths
TTh	Th	H	T	O	t	h	th	tth

Addition and Subtraction Integer Rules

The rule gives the sign of the operation when 2 signs are next to each other

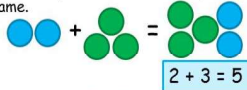


$6 + -3$
 $6 - 3 = 3$
 $-10 + 2$
 $-10 - 2 = -12$
 $5 - 4$
 $5 + 4 = 9$



Inequalities

The equals symbol is used to tell us that two quantities are exactly the same.



There is exactly the same number of dots on both sides of the equals symbol.

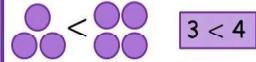
$<$ "less than"
 $>$ "greater than"

An inequality symbol is used to show the relationship between two (or more) quantities when they are not equal. The arrow points towards the smaller quantity.

There are 4 on the left and 3 on the right: "4 is greater than 3".



This could be flipped round and written as "3 is less than 4".



When working with inequalities in algebra, you will also see the following symbols:

\leq "less than or equal to"
 \geq "greater than or equal to"

Inverse Operations

$+$	$-$
$-$	$+$
\times	\div
\div	\times
x^2	\sqrt{x}

Ordering Decimals

Step 1 Stack numbers up & line up decimal place

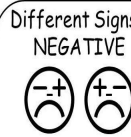
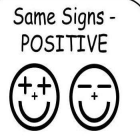
Step 2 Add zeros to get same number of decimal digits

Step 3 Compare each place value

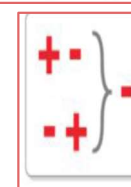
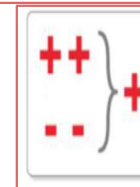
Step 4 Order the numbers

4.8	4.800	4.800	
4.826	4.826	4.826	
4.08	4.080	4.080	
4.006	4.006	4.006	

Multiplying and Dividing Integers Rules



$7 \times -4 = -28$
 $-6 \times -4 = 24$
 $-35 \div 5 = -7$
 $-40 \div -8 = 5$



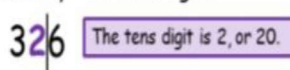
Note

Multiplying by 0.1 is the same as dividing by 10
Multiplying by 0.01 is the same as dividing by 100

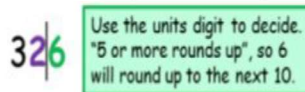
Rounding

Rounding to nearest 10 etc. 3) Decide if it stays or rounds up.

1) Identify the tens digit.

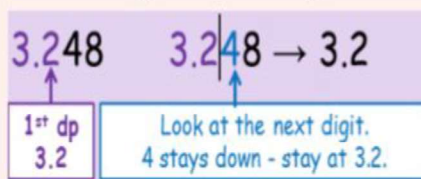


2) Work out the next ten up.



326 \rightarrow 330

Rounding to decimal places:



Round to the nearest 100- hundred

Underline the number in hundreds place

Look at the number to the right next door

If it's 5 or more, round the hundred up, if not it stays the same

Add zeros after the number you underlined

231 231 231 200