



IGCSE -A01- Numbers and Number System

Integers and Directed Numbers

Learning outcomes : A- E

Core skills

$$-7 + 12 =$$

$$-5 - 9 =$$

$$-4 \times 6 =$$

$$-18 \div (-3) =$$

$$-8 - (-12) + 2 \times (-4) =$$

$$-2 \times -4 \times -8 =$$

Write 5308 in expanded form

What is the value of the digit 6 in 2613 ?

Write down all the integers from -3 to 7 inclusive ?

Arrange the integers 12, -2, 0, -6, 15 in ascending order ?

The temperature at night was -5°C then rose to 8°C . Find the temperature increase.

A bank account has a negative balance of $-\text{£}350$. After Depositing $\text{£}400$ find the new balance ?

Clarify

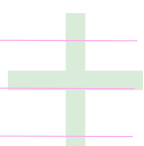
Is -6 greater or smaller than -2 ? How do you know ?

In the temperature -5°C , what does the negative represent?

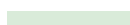
What is the difference between $5 - 3$ and $5 - (-3)$?

Justify

Explain why $-3 + 5$ gives a positive answer ?



Why is -6×-4 positive ?



Explain why subtracting a negative results in addition?



Challenge

Is $-1 \times -1 \times -1$ Positive or negative?



Create an expression that looks negative but equals a positive number.



Can adding a negative ever increase a number?
If so give an example



Generalise

What happens if you multiply an even number of negatives?

What happens if you multiply an odd number of negatives?

Write a general rule for determining the sign of any calculation.

