



**INTO
MATH**
LEARN IT FAST

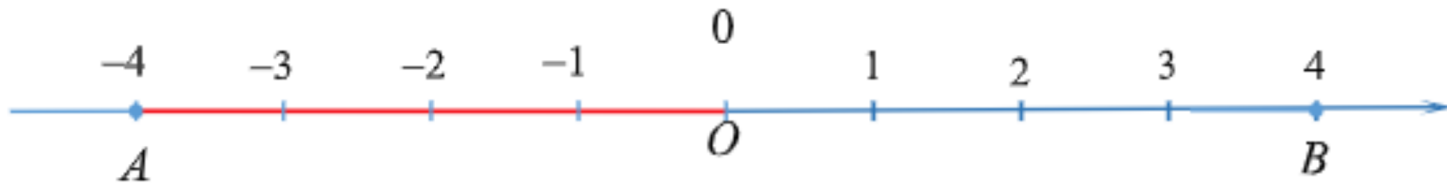
GRADE 7 - LESSON 5

**ADDING/SUBTRACTING
POSITIVE/NEGATIVE
NUMBERS**

ABSOLUTE VALUE

An absolute value is the distance on a number line from point $M(a)$ to point $O(0)$

Point $A(-4)$ corresponds to the number -4 on the number line

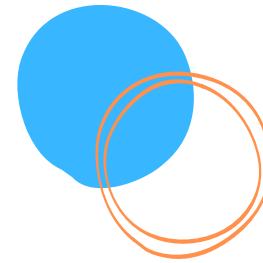


The distance from this point to point O is 4 units.

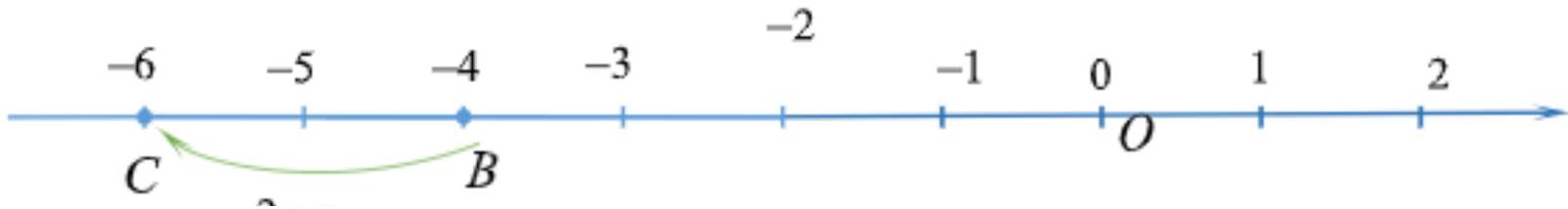
Therefore, the absolute value of $A(-4)$ is 4.

Record it as $|-4| = 4$

ADDING NEGATIVE NUMBERS



If the temperature outside was -4 degrees Celsius and then changed by -2 degrees Celsius (meaning decreased by 2 degrees), then the new temperature equals $(-4) + (-2)$

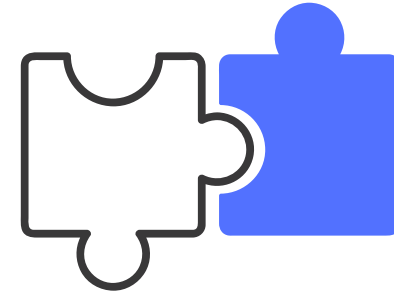


Point B should be moved two units to the left.

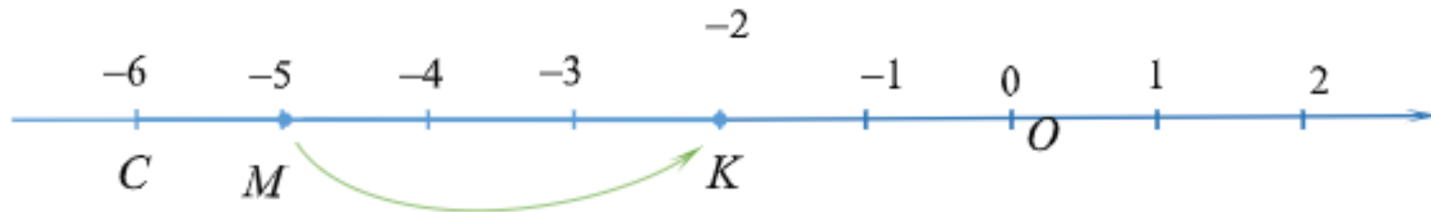
That makes a new point C(-6) $(-4) + (-2) = (-6)$

To add two negative numbers, add their absolute values and put a "-" sign in front of the sum.

ADDING NUMBERS WITH DIFFERENT SIGNS

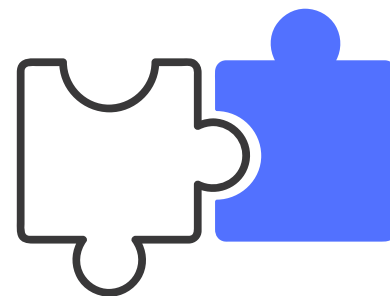


If the outdoor temperature was initially -5 degrees Celsius and then changed by 3 degrees Celsius (meaning increased by 3 degrees), then it equals $(-5) + 3$

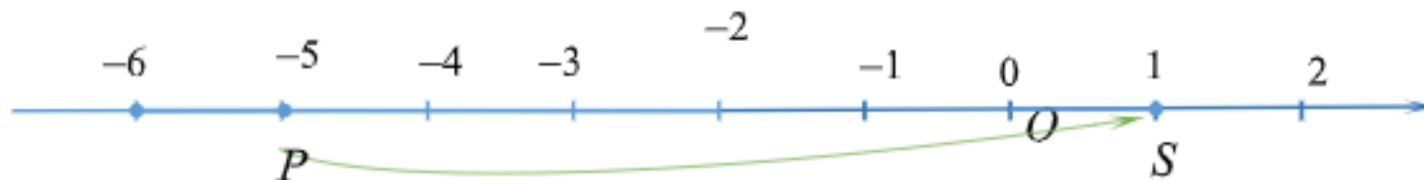


Point M(-5) has moved 3 units to the right and resulted in the new point K(-2). $(-5) + 3 = -2$

ADDING NUMBERS WITH DIFFERENT SIGNS

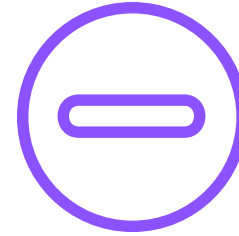


If the temperature was -5 degrees Celsius and increased by 6 degrees Celsius, then the new temperature is $(-5) + 6 = 1$



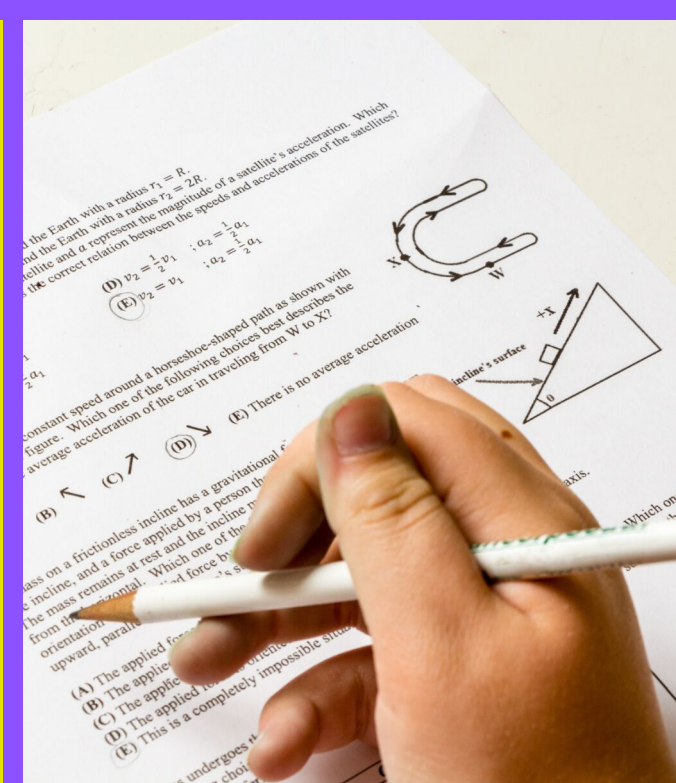
In general, to add the two numbers with different signs, subtract the number with the lesser absolute value from a number with the greater absolute value and keep the sign of the number with the greater absolute value.

SUBTRACTING NUMBERS WITH DIFFERENT SIGNS



To subtract one number from another number, add the number that is opposite to the subtrahend to the minuend.

$$a - b = a + (- b)$$



CONTINUE TO GRADE 7 LESSON 6!

With questions, requests or suggestions
email us at intomath101@gmail.com

For more resources visit
www.intomath.org

you ROCK!

