POSITIVE AND NEGATIVE NUMBERS

ADDITION

LIKE signs – Add the numbers and keep the common sign.

UNLIKE signs – Find the difference between the 2 numbers and keep the sign of the "larger" number (i.e. the number with the greatest absolute value).

Examples: LIKE signs
$$-7 + -3 = -10$$
$$8 + 6 = 14$$

UNLIKE signs
$$5 + -9 = -4$$
$$9 + -8 = 1$$

SUBTRACTION

1. Change the subtraction to addition:
   Change the subtraction sign to an addition sign.
2. Make the second number its opposite:
   Change the sign of the second number.
3. Use the addition rules to determine the answer

Examples: $-7 - -5 = -7 + +5 = -2$
$$8 - -10 = 8 + +10 = 18$$
$$-5 - 8 = -5 + -8 = -13$$
$$3 - 9 = 3 + -9 = -6$$

MULTIPLICATION AND DIVISION

Two LIKE signs – The answer is positive [i.e. (+)(+) = (+) and (-)(-) = (+)]
Two UNLIKE signs – The answer is negative [i.e. (+)(-) = (-) and (-)(+) = (-)]

Examples   LIKE signs
$$-8 \cdot -9 = 72$$
$$-40 \div -8 = 5$$

UNLIKE signs
$$5 \cdot -7 = -35$$
$$\frac{-16}{8} = -2$$