

Negative Number Scenarios

Multiplication

$$\begin{array}{ccccc} (+) & \cdot & (-) & = & (-) \\ \text{Positive} & & \text{Negative} & & \text{Negative} \end{array}$$

$$\begin{array}{ccccc} (-) & \cdot & (-) & = & (+) \\ \text{Negative} & & \text{Negative} & & \text{Positive} \end{array}$$

$$\begin{array}{ccccc} (-) & \cdot & (+) & = & (-) \\ \text{Negative} & & \text{Positive} & & \text{Negative} \end{array}$$

Division

$$\begin{array}{ccccc} (+) & \div & (-) & = & (-) \\ \text{Positive} & & \text{Negative} & & \text{Negative} \end{array}$$

$$\begin{array}{ccccc} (-) & \div & (-) & = & (+) \\ \text{Negative} & & \text{Negative} & & \text{Positive} \end{array}$$

$$\begin{array}{ccccc} (-) & \div & (+) & = & (-) \\ \text{Negative} & & \text{Positive} & & \text{Negative} \end{array}$$

Addition

A = greater value

a = lesser value

(+ -) = (-) An addition symbol (+) followed by a negative symbol (-) is equal to a subtraction symbol (-)

$$\begin{array}{ccccc} (-) & + & (-) & = & (-) \\ \text{Negative} & & \text{Negative} & & \text{Negative} \end{array}$$

$$\begin{array}{ccccccc} (+a) & + & (-A) & \text{OR} & (-A) & + & (+a) & = & (-) \\ \text{Positive} & & \text{Negative} & & \text{Negative} & & \text{Positive} & & \text{Negative} \end{array}$$

$$\begin{array}{ccccccc} (+A) & + & (-a) & \text{OR} & (-a) & + & (+A) & = & (+) \\ \text{Positive} & & \text{Negative} & & \text{Negative} & & \text{Positive} & & \text{Positive} \end{array}$$

$$\begin{array}{ccccccc} (+A) & + & (-A) & \text{OR} & (-A) & + & (+A) & = & 0 \\ \text{Positive} & & \text{Negative} & & \text{Negative} & & \text{Positive} & & \text{Zero} \end{array}$$

Subtraction

A = greater value

a = lesser value

(- -) = (+) A subtraction symbol (-) followed by a negative symbol (-) is equal to an addition symbol (+)

$$\begin{array}{ccccc} (+a) & - & (-A) & = & (+) \\ \text{Positive} & & \text{Negative} & & \text{Positive} \end{array}$$

$$\begin{array}{ccccc} (+A) & - & (-a) & = & (+) \\ \text{Positive} & & \text{Negative} & & \text{Positive} \end{array}$$

$$\begin{array}{ccccc} (-a) & - & (+A) & = & (-) \\ \text{Negative} & & \text{Positive} & & \text{Negative} \end{array}$$

$$\begin{array}{ccccc} (-A) & - & (+a) & = & (-) \\ \text{Negative} & & \text{Positive} & & \text{Negative} \end{array}$$

$$\begin{array}{ccccc} (-a) & - & (-A) & = & (+) \\ \text{Negative} & & \text{Negative} & & \text{Positive} \end{array}$$

$$\begin{array}{ccccc} (-A) & - & (-a) & = & (-) \\ \text{Negative} & & \text{Negative} & & \text{Negative} \end{array}$$

$$\begin{array}{ccccc} (+a) & - & (+A) & = & (-) \\ \text{Positive} & & \text{Positive} & & \text{Negative} \end{array}$$

$$\begin{array}{ccccc} (-A) & - & (-A) & = & 0 \\ \text{Negative} & & \text{Negative} & & \text{Zero} \end{array}$$