

ADDITION

Same sign: Ignore the signs and add the 2 numbers. Give the answer the sign they both share.

$$\ominus 5 + (\ominus 3) = \ominus 8$$

$$11 + 4 = 15$$

Different signs:

Ignore the signs and subtract the 2 numbers. Give the answer the sign of the larger absolute value.

$$\ominus 8 + 2 = \ominus 6$$

$$14 + (-3) = 11$$

SUBTRACTION

Change to addition by adding the opposite. Then follow the addition rule.

$$\begin{array}{r} -8 - (-3) \\ | \quad | \\ -8 + 3 \end{array}$$

$$\begin{array}{r} 8 - 6 \\ | \quad | \\ 8 + (-6) \end{array}$$

$$= -5$$

$$= 2$$

MULTIPLICATION & DIVISION

Same sign: The answer is positive.

$$\ominus 5 \cdot (\ominus 2) = 10$$

$$20 \div 4 = 5$$

Different signs: The answer is negative.

$$10 \cdot (\ominus 2) = \ominus 20$$

$$\ominus 8 \div 4 = \ominus 2$$