Multiplication and Division of Integers

MULTIPLICATION

RULE 1: The **product** of a **positive** integer and a **negative** integer is **negative**.

RULE 2: The **product** of two **positive** integers is **positive**.

RULE 3: The **product** of two **negative** integers is **positive**.

Examples:

Rule 1: 1. (+4) x (-2) = -8 2. (-2) x (+5) = -10

Rule 2: 1. (+6) x (+8) = +48 2. (+6) x (+2) = +12

Rule 3: 1. (-6) x (-8) = +48 2. (-2) x (-4) = +8

DIVISION

RULE 1: The **quotient** of a **positive** integer and a **negative** integer is **negative**.

RULE 2: The **quotient** of two **positive** integers is **positive**.

RULE 3: The **quotient** of two **negative** integers is **positive**.

Examples:

Rule 1: 1. (-8) / (+4) = -2 2. (-12) / (+6) = -2

Rule 2: 1. (+6) / (-3) = -2 2. (+24) / (-6) = -4

Rule 3. 1. (+9) / (+3) = +3 2. (+16) / (+4) = +4

Rule 4: 1. (-6) / (-2) = +3 2. (-42) / (-7) = +6

SUMMARY OF MULTIPLICATION AND DIVISION RULES

1. If the signs are different the answer is **negative**.
2. If the signs are alike the answer is **positive**.