

P7. Math division

In math, division is quite tricky, such that given numerator a is divided by

a denominator b , the division result r is as follows:

* if both $a = 0$ and $b = 0$ then the division is not defined. So, report “Not defined” to a user;

* if $a \neq 0$, $b = 0$ then r will be ∞ when $a > 0$

Or r will be $-\infty$ when $a < 0$;

So, report either “Infinity” or “Negative infinity” as fit;

* otherwise $r = a \div b$ (for regular division) and report the division result.

Example 1:

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a: 10

b: 2

a/b = 5.0

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Example 2:

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a: 0

b: 2

a/b = 0.0

Example 3:

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a: 2

b: 0

a/b = Infinity
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Example 4:

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a: -2

b: 0

a/b = Negative Infinity
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Example 5:

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a: 0

b: 0

a/b = Not defined
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