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0.1 Euclidian division

Euclidian division is the theory for any pair of natural numbers, we can divide one by the other and have a remainder less than the divisor. Formally: $\forall a \in \mathbb{N}, \forall b \in \mathbb{N}^+, \exists q \in \mathbb{N}, \exists r \in \mathbb{N}[(a = bq + r) \wedge (0 \leq r < b)]$

Where $\mathbb{N}^+$ refers to natural numbers excluding 0.

That is, every natural number a is a multiple q of any other natural number b, plus another natural number r less than the other natural number b.

These are unique. For each jump in q, r falls by b. As the range of r is b there is only one solution.

$17 = 2.8 + 1$

$9 = 3.3 + 0$