A sequence linearly converges to if there is a fraction such that

Equivalently

**Big O-Notation**

Used to describe

1. How fast error converges to 0
2. How fast space and time complexity diverge to

**Formal Definition.** A sequence converges to a number if for any positive number , there exists a cutoff , such that after the cutoff (the rest of the sequence is close enough to the limit ( ).

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