



Math for the people, by the people.

## Cartesian coordinates

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Defines	abscissa
Defines	ordinate
Defines	applicate

The *Cartesian coordinates* of a point in  $\mathbb{R}^3$  for determining its in three-dimensional space are the three real numbers  $x$ ,  $y$  and  $z$ , which are called

- $x$ -coordinate or *abscissa*,
- $y$ -coordinate or *ordinate*,
- $z$ -coordinate or *applicate*.

The last name “applicate” is rare in English, but its in continental European , as “die Applikate” in German and “aplikaat” in Estonian, are more known.

Similarly, in  $\mathbb{R}^n$  for all  $n = 1, 2, 3, \dots$  one needs  $n$  coordinates for specifying the location of a point.