

Functions

Worked Examples

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But if we are more explicit – each person’s weight in pounds wherever they happen to be at exactly noon Pacific Standard time on Friday January 5th, 2007, -- now we do have exactly one weight for each person, and that would define a function.

Does the relationship that tracks a person's weight (in pounds) over time define a function?

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Yes, this gives a different function for each person. For any given person, there is exactly one weight in pounds at each instant, so the exactly one feature is satisfied.

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$$x + 2 < 0, \text{ or}$$

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The domain of this function is the set of all real numbers except those that are less than negative 2, or

$$\{x \in \mathbb{R} \mid x \geq -2\} \text{ or } [-2, \infty).$$

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We just substitute 4 for t in the algebraic rule (plug it in):

$$g(4) = -11(4^2) + \pi = -176 + \pi$$