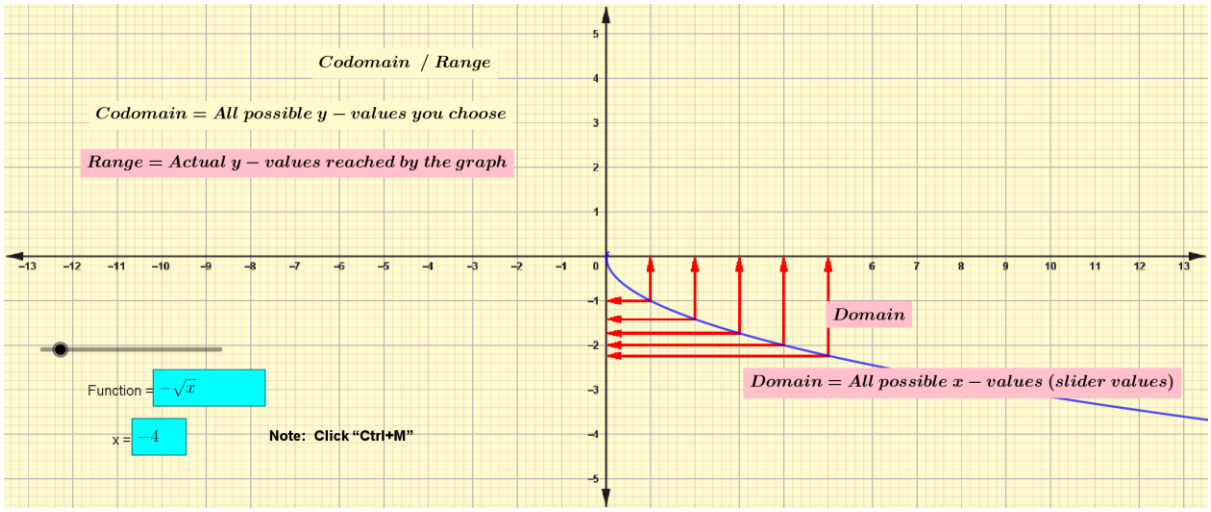
Domain, Codomain, and Range

A Visual Understanding Using GeoGebra

Author: K. KUMARAVELU

Mathematics becomes easier to understand when abstract ideas are represented visually. One of the most important concepts in the study of functions is the distinction between **domain**, **codomain**, and **range**.

A function can be viewed as a rule that assigns exactly one output to every input. The collection of all permissible input values forms the **domain** of the function. The set into which the outputs are intended to belong is called the **codomain**, while the collection of outputs actually produced by the function is known as the **range**. By observing a function graph and moving points along the curve in GeoGebra, learners can clearly see how inputs are transformed into outputs and understand the relationship among these three sets.



https://www.geogebra.org/m/sktmtzs7