

函数图像的几类画法研究

摘 要

本文主要研究的是函数图像的几类画法，在中学我们主要学习的描点作图法，也就是说，根据函数解析式找出一些点，然后进行连线，然而这种传统的作图方法不能很好的反映函数的性质，因此本文从几何画板、MATLAB 和 MAPLE 三个方面介绍了函数图像的画法.本文分别从实例出发研究了它们绘制函数图像的方法，通过它们可以更直观的观察出函数图像，使我们能够清楚的了解函数的性质.现在 MATLAB 和 MAPLE 已经逐渐应用到科研、教育等众多领域，并在其中发挥着重要的作用.

关键字：函数图像，描点法，几何画板，MATLAB，MAPLE

Abstract

This paper mainly studies the function of image of several kind of illustration, we mainly study tracing point mapping method in middle school, that is, according to the function analytical formula to find out some points, and then in the attachment, however, the traditional drawing method can not reflect the function of the nature of the very well, so this article from the geometry sketchpad, MATLAB and MAPLE three aspects introduced the appearance of function image. In this paper, we study their methods of drawing function images from examples, through which they can be more intuitive to observe the function image, so that we can clearly understand the nature of the function. Nowadays, MATLAB and MAPLE have been gradually applied to research, education and other fields, and play an important role in them.

Keywords: Function of image, Tracing point method, Geometry sketchpad, MATLAB, MAPLE

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