

Chapter 1

Basic Classes of Functions

Checkpoint Solution

Checkpoint 1.23: Determining Whether a Function Is One-to-One

Instruction

Is the function f graphed in figure 1.1 one-to-one?

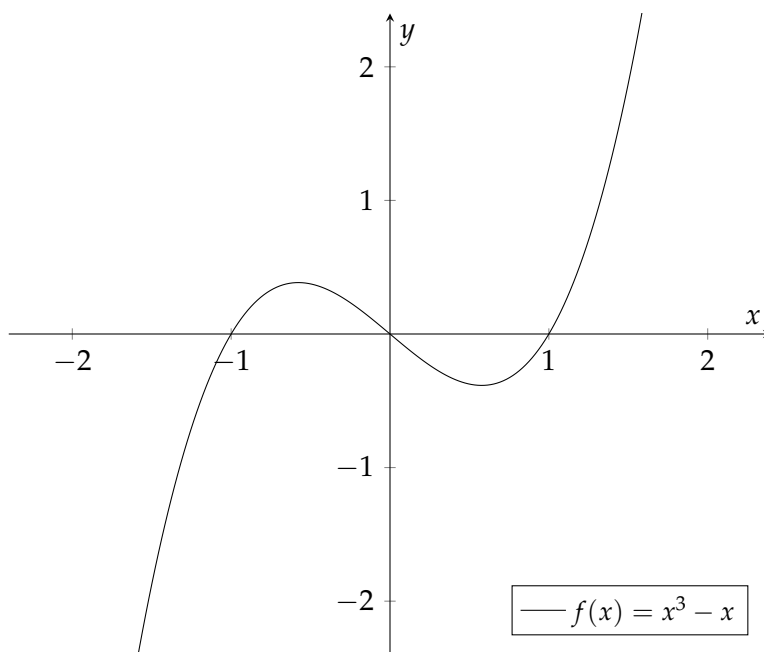


Figure 1.1: Graph for checkpoint 1.23

Solution

The function is not one-to-one because it does not pass the horizontal line test. One example being the line $y = 0.25$, see figure 1.2 how this line intersects the graph in three places.

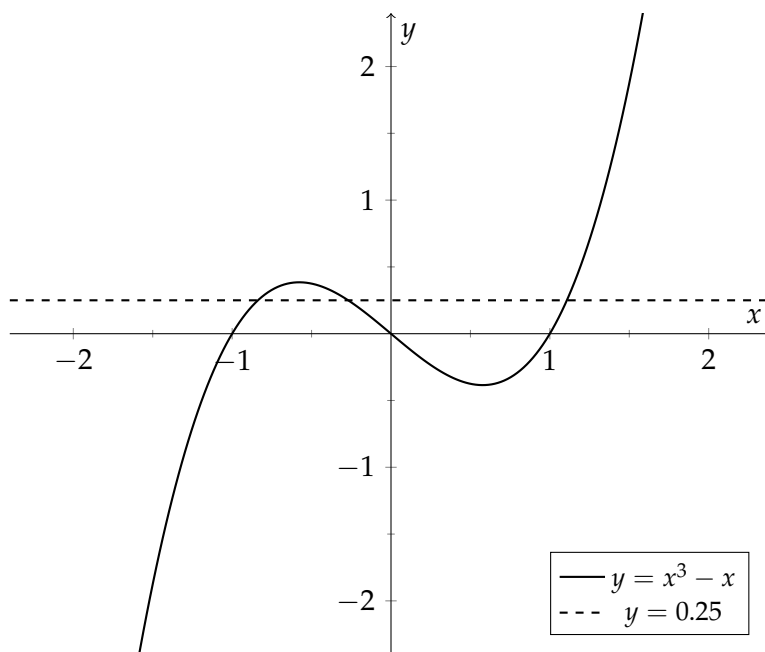


Figure 1.2: Horizontal line test show that function is not one-to-one

Answer

No.