

Exercise 48

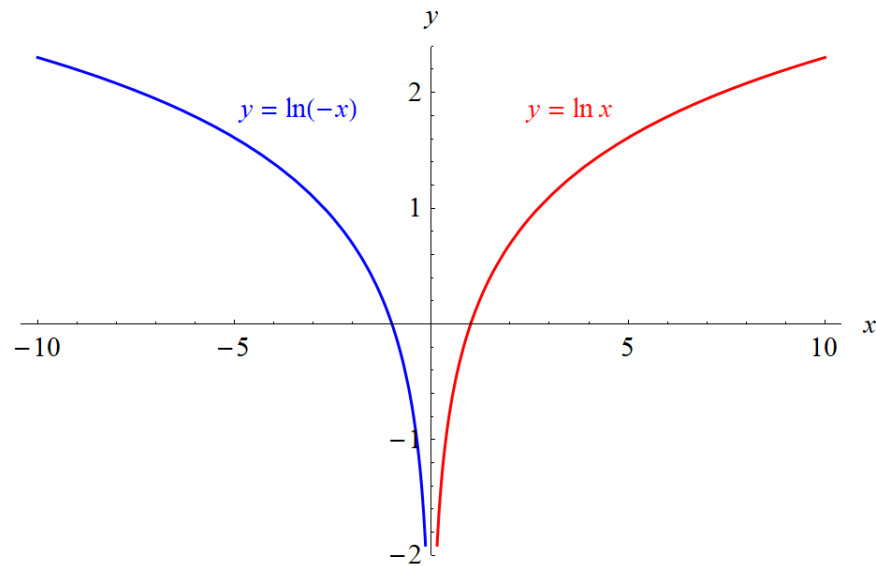
Make a rough sketch of the graph of each function. Do not use a calculator. Just use the graphs given in Figures 12 and 13 and, if necessary, the transformations of Section 1.3.

(a) $y = \ln(-x)$

(b) $y = \ln|x|$

Solution

Changing the argument from x to $-x$ mirrors the graph over the y -axis.



Placing the argument within an absolute value sign extends the graph to negative values and makes it look symmetric about the y -axis.

