1. Find the domain and range of the following:

For this kind of function, the denominator can never be 0 but the value of the variable can also be anything as long as it doesn’t make the function undefined

To be represent this, we do

Domain

Domain

.

,

Solve for x in:

If , where , ,, , , find

Answer: 24.

For each of the following functions, find the values of the constants a and b for which the function is continuous, but not differentiable

a=2, b=0

For each of the following functions, find the values of the constants a and b for which the function is continuous

a=2, b=-1

if and if f is continuous at x=0, then K=?

Answer: -1/2

-1, -1/2, 0, 1

Find the domain of the function

Answer: e^(1/x)

Find all values of c and d for which the function is differentiable

Answer: c=6, d=0

One of the following is false as a general guideline for curve sketching.

Domain, intercepts, avoid asymptotes, determine local maximum and minimum points

The function has

A maximum at x=1 and a minima at x=3

A maxima at x=3 and a minima at x=1

No maxima, but a minima at x=1

A maximua at x=1, but no minima

,x, f(0)=1/2, evaluate

Answer: DNE

Then f(x) is continuous f(x)

Answer: x=1 or 2