How Would You Obtain the Graph of...

(a)

(b)

(c)

More Examples: Find the domain of each function.

(a)

(b)
Section 4.3 - Laws of Logarithms

Laws of Logarithms
Let \( a \) be a positive number, with \( a \neq 1 \). Let \( A > 0 \), \( B > 0 \), and \( C \) be any real numbers.

1. \( \log_a(AB) = \log_a A + \log_a B \)
2. \( \log_a \left( \frac{A}{B} \right) = \log_a A - \log_a B \)
3. \( \log_a(A^C) = C \log_a A \)

TONS of Examples
- Use the Law of Logarithms to rewrite the expression in a form with no logarithm of a product, quotient, root, or power.

(a)

(b)

(c)

(d)
(e)

(f)

(g)

(h)

- Rewrite the expression as a single logarithm.

(i)

(j)

(k)
• Evaluate the expression.