

Solving Logarithmic Equations Math 3

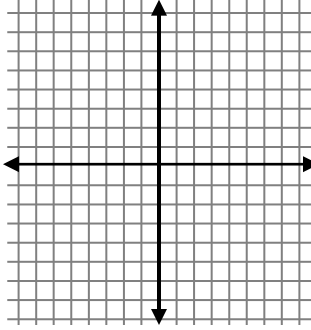
Domain of $y = \log_2(x)$

1. Sketch the graph of $y = \log_2(x)$:

2. Domain: _____

3. Approximate on Calculator:

$\log_2(-5) \approx$ _____



Steps for Solving Logarithmic Equations

1. _____
2. _____
3. _____
4. _____
5. _____

Examples (Always check to ensure the solution is in the domain of the function.)

1. $\log 3x = 2$

2. $\log_3(5x-1) = \log_3(x+7)$

3. $5 + 2\log x = 4$

4. $2\log_5 3x = 4$

5. $\log(x-2) + \log(2x-3) = 2\log x$

6. $\log x + \log(x-9) = 1$