Different methods to solve exponential equation

PPS – GVC – Math – Advance Algebra





Solving the exponential equation

**Method 1**: Common base

Divide by 2

Convert 7 to the same base 3 7

Rewrite the equation with same base

Apply exponential property: product

***Cancel the base***

Distribute and separate variable

Factor and solve for x

**Method 2**: Using logs

Divide by 2

***Take log both sides, use common log***

Apply logarithm property

Distribute and separate variable

Factor and solve for x

**Method 3**: Use Exponential Properties



Divide by 2. Apply exponential property. Apply cross multiply property to separate variable

   

Apply inverse property to solve for x



**Method 4**: Graphing method

Graph the exponential function of the left side, then the right side.

Locate the intersection of these two

