HS ALG.3.REI.9.Complex Solutions

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| Definitions: |
| Complex solutions - Complex solutions or roots are numbers that have an imaginary part to them. An imaginary number i , is equal to the square root of negative 1. |
| Example: ax2 + bx + c = 0 |
| |  |  |  | | --- | --- | --- | | I do | 1 | Divide both sides by -4 | |  |  | Take the square root of both sides of the equation to undo the (x-2) squared. | | We do |  |  | |  | 1 | Use the Quadratic Formula: | |  |  | a=3, | |  |  | b=-4, | |  |  | c=5  Since the equation is of form ax2 + bx + c = 0  We can use the Quadratic Formula to find solutions. | |

2.

Since the value inside the square root is negative, there is no real number solution and we must consider imaginary solutions (i).

So factor out a -1 from -44.

Rewrite the square root as a product of roots.

3.Divide by the GCF of the terms to reduce the rational expression.