Math 3 **2.7 Inverse Relations (Equations)** Unit 2

*EQ: How can we find the inverse of a function given the equation of a function?*

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| To find an inverse:1. Swap x and y
2. Solve for y
3. Rewrite by writing f-1(x) =
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**Example 1:** Find the inverse of the function f(x) = x2 – 9

**Example 2:** Find the inverse of the function$ f\left(x\right)=$ $\frac{ x+3}{6}$

**You Try!** Find the inverse of the function $f\left(x\right)=3x^{2}+5$

**Challenge!** Find the inverse of f(x) = $\frac{ x-6}{x}$

Math 3 **2.8 Verifying Inverse Relations** Unit 2

*EQ: How do we verify that two relations are inverses of each other?*

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| Determining if Two Relations are Inverses of Each Other:1. Find f(g(x))
2. If the composition = x, then the relations are inverses of each other!
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**Example 1:** Determine if each of the following are inverses of each other.

1. 



1. 



1. 

