

## Algebra II Day 13 Formative Ticket

**Standards**  
**MGSE9-12.F.BF.4 (Inverse functions)**  
**MGSE9-12.F.BF.4a ( $f(x)=c$  & inverse)**  
**MGSE9-12.F.BF.4b (Use composition to verify inverses)**  
• R1: I can use composition functions to verify inverse function relationships.  
**MGSE9-12.F.BF.4c (Values of inverse function from graph or table)**  
• K1: I can read values of an inverse function from a graph or table.

**Target(s):** Finding Inverse Functions Algebraically; Finding Inverse Values from a Table

### Finding Inverse Functions Algebraically and Verifying Inverse Functions

Verify that  $f(x)$  and  $g(x)$  are inverse functions.

$$1) \quad f(x) = x^2 \quad g(x) = \sqrt{x}$$

$$2) \quad f(x) = 3 - 4x \quad g(x) = \frac{3-x}{4}$$

$$3) \quad f(x) = \frac{x^3}{8} \quad g(x) = \sqrt[3]{8x}$$

$$4) \quad f(x) = \frac{x+3}{x-2} \quad g(x) = \frac{2x+3}{x-1}$$

Find the inverse function for each equations

$$1) \quad f(x) = 2x$$

$$2) \quad f(x) = 7x + 1$$

$$3) \quad f(x) = \frac{x^3}{8}$$

$$4) \quad f(x) = \sqrt{x-4}$$