Name: Date:

مدرسة الاتحاد الوطنية الخاصة - العين
Al Ittihad National Private School - Al Ain

Title: Geometry: **7.1 Inverse Functions and Function Composition**

LO: To find inverse functions and use composition of functions to create new functions.

Instructions: Copy the following questions to your notebook and solve them. Once done submit them on Schoology

1) $f(x) = x + 5$

Find:

$f(1)$:

$f(10)$

$f(6)$

2) Choose the correct answer:

What operation was done to x ?

a) Add 5
b) Multiply by 5

To undo this, we must:

a) Add 5
b) Subtract 5

3) Write the inverse function of $f(x) = x + 5$

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4) The functions f(x) and g(x) are given by the following:

$$f(x) = x + 5$$
$$g(x) = 3x + 8$$

- Find $f(3)$

- Find gf(3) - $[(g\ o\ f)(3)]$

Challenge:

Find the inverse functions of:

a) $f(x) = x - 6$

1: Replace $f(x)$ with y

2: Make x the subject

3: Switch x and y

4: Replace y with $f^{-1}(x)$

b) $f(x) = 5x + 1$

1: Replace $f(x)$ with y

2: Make x the subject

3: Switch x and y

4: Replace y with $f^{-1}(x)$