

Intermediate Algebra
University of North Georgia
Fall 2015
Quiz #6

Name: Key Date: October 14, 2015

Determine if the following relations are also functions. State the Domain and Range. Explain your answer!

1. $\{(-2, 6), (3, -9), (6, -2), (4, -9), (3, 8), (-6, -2)\}$

No, because of $(3, -9)$ & $(3, 8)$
 Domain: $\{-2, 3, 6, 4, -6\}$
 Range: $\{6, -9, -2, 8\}$

2. $\{(a_1, b_2), (a_2, c_2), (a_3, b_2), (a_1, c_2)\}$

No, because (a_1, b_2) & (a_1, c_2)
 Domain: $\{a_1, a_2, a_3\}$
 Range: $\{b_2, c_2\}$

3. Evaluate $p(x) = 2 - 3x$ for $\frac{p(x+h) - p(x)}{h}$

$$\frac{2 - 3(x+h) - (2 - 3x)}{h}$$

$$\frac{2 - 3x - 3h - 2 + 3x}{h}$$

$$\frac{-3h}{h} = \boxed{-3}$$