

Name: _____

Student Number: _____

1. Are these equations representing y as a function of x ? (Yes or No)

a) $y^2 = 5x$

b) $y = 4x^2$

c) $y = \sqrt{4x - 6}$

2. Find the Domain and Range for the following functions.

a) $y = 2x^2 + 8$ Domain: Range:

b) $y = \frac{x+2}{3x-5}$ Domain: Range:

c) $y = \sqrt{x-3}$ Domain: Range:

3. Determine whether the following functions are even, odd or neither. Then determine whether they are increasing, decreasing or neither on the given interval

a) $y = \sin x$, on $-1 \leq x \leq 1$

b) $y = -5x + 2$, on $0 \leq x \leq 3$

c) $y = 3x^2 + 8$, on $-2 \leq x \leq 3$

4. Determine whether these are polynomials. If they are, state the degree

a) 5

b) $4y - 3x$

c) $4x^5 + 5x^3 + 21$