

4/5

Name: Rawan Sadeq

Student number: 210295

1) Which of the following is an odd function

a)  $\csc(2x)$

b)  $|x|$

c)  $\cos x$

2) The range of the function  $\frac{1-\cos x}{2}$  is

a)  $[-1, 1]$

b)  $[0, 1]$

c)  $[0, 2]$

3)  $\lim_{x \rightarrow \infty} \frac{\sin(x^2)}{x}$

a)  $\infty$

b) 1

c) 0

4) The function  $f(x) = \frac{x^2-x}{x^2+x}$  has

a) vertical asymptote at  $x = 0$

b) removable discontinuity at  $x = 0$

c) none of the above

5) The function  $f(x) = x^4 + 2x^3 - 5x - 3$  has a root in the interval

a)  $(-1, 0)$

b)  $(0, 1)$

c)  $f$  has no roots

$$f(-1) = 1$$

$$f(0) = -3$$

$$1x - 3 = -3$$

root موجود