

MATHEMATICS DEPARTMENT  
MATH 1411 -Quiz 1-  
First Semester 2021/2022

Name (Arabic) [REDACTED]

Number... [REDACTED]

Q1) The domain of the function  $h(x) = \frac{1}{x^2+4}$  is

1.  $(-2, 2)$
2.  $(0, \infty)$
3.  $(-\infty, -2) \cup (2, \infty)$
4.  $(-\infty, \infty)$

Q2) The graph of the function  $y = \cos(x - \frac{\pi}{2})$  is symmetric about

1. x- axis
2. origin
3. y- axis
4. none

Q3)  $\lim_{x \rightarrow 0} \frac{\tan 3x}{x}$

1.  $\frac{1}{3}$
2.  $\infty$
3. 0
4. 3

Q4) The graph of  $f(x) = \frac{x^2}{x+1}$  has

1. an oblique asymptote  $y = x - 1$
2. a vertical asymptote  $x = 2$
3. horizontal asymptote at  $y = \frac{1}{2}$