

BIRZEIT UNIVERSITY
MATHEMATICS DEPARTMENT

Quiz 4

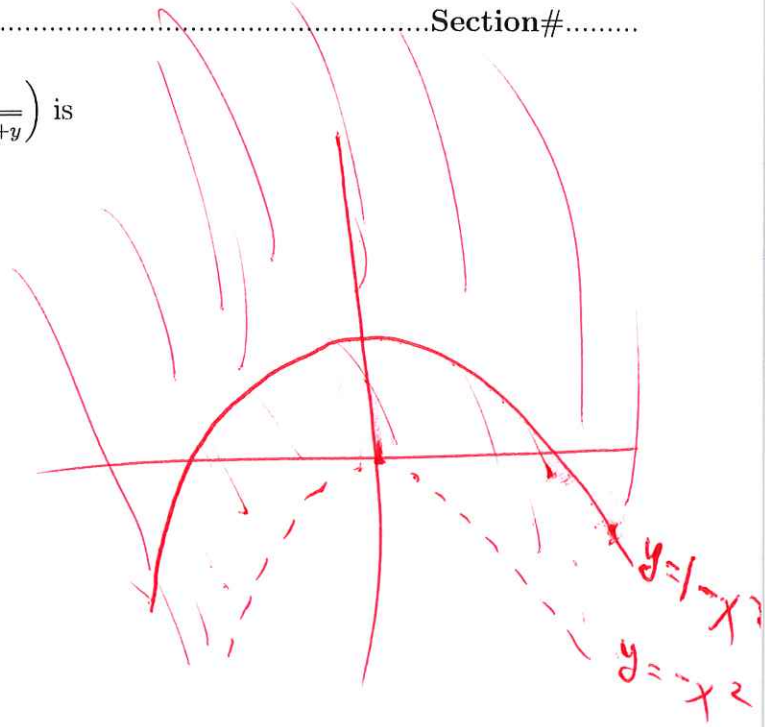
Math2311

Fall 2018/2019

Name.....BZU#.....Section#.....

1. Circle the correct answer The domain of $\cos^{-1}\left(\frac{1}{\sqrt{x^2+y}}\right)$ is

- (a) Closed and bounded
- (b) Closed and unbounded
- (c) Open and bounded
- (d) Open and unbounded
- (e) Neither open nor closed and bounded
- (f) neither open nor closed and unbounded



2. Find $\lim_{(x,y) \rightarrow (2,1)} \frac{x^2 - 4y^2}{x^4 - 16y^4} = \frac{0}{0}$

$$= \lim_{(x,y) \rightarrow (2,1)} \frac{x^2 - 4y^2}{(x^2 - 4y^2)(x^2 + 4y^2)} = \frac{1}{8}$$