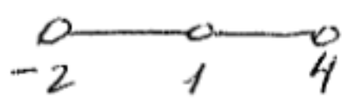
MATA31 TUT000

Quiz 1 on (A1 & A 2) **Mark:_____/20**

Last Name:_____ **First Name:_____** **Student #:_____**

1. [3 points] Express the punctured interval of radius 3 around $x = 1$ in three ways:
   a) As a picture on a real number line.
   b) Using interval notation.
   c) With a double inequality involving absolute value.

a) 

b) $x \in (-2, 1) \cup (1, 4)$

c) $0 < |x - 1| < 3$

Check: $x > 1$: $0 < x - 1 < 3$, $1 < x < 4$ $\quad x < 1$: $0 < -(x-1) < 3$, $-1 < -x < 2$