

## Take-Home Quiz 2

Due Monday, October 21, 2019

1. Use the  $\epsilon$ - $\delta$  definition of limits to prove the following.

(a)  $\lim_{x \rightarrow 1} (x^2 - 3x) = -2$ .

(b)  $\lim_{x \rightarrow 2} (x^2 - 4x + 1) = -3$ .

(c)  $\lim_{x \rightarrow 1} (x^3 - 2x^2 - x + 1) = -1$