

MATH 150A-QUIZ 1, WINTER 2020

Name: _____

1. Consider following problems concerning bounded sets.
 - (1) (2 pts) State the definition of *bounded Sets*.
 - (2) (3 pts) Show that $S = (-1, 1) \cup \{1, 2, \dots, 10\}$ is bounded.

2. Consider following problems concerning convergence sequences.

- (1) (2 pts) State the definition of *convergent sequences*.
- (2) (3 pts) Show that if $\lim_{n \rightarrow \infty} a_n = L$, then $\lim_{n \rightarrow \infty} |a_n| = |L|$.