## MATH 150A-QUIZ 8, WINTER 2019

Name: \_\_\_\_\_

1. (5 pts) Let f and g are monotone increasing functions. Show that if the composite function  $f \circ g$  is defined, then it also monotone increasing.

2. (5 pts) Show that the limit set of the set of rational numbers, i.e.  $\mathbb{Q}'$ , is the set of real numbers  $\mathbb{R}$ , i.e. every real number is a limit point of the set of rational numbers, or simply  $\mathbb{Q}' = \mathbb{R}$ .