

This quiz is worth 10 points and you have 10 minutes to complete it. Show all work and circle your final answers.

Calculators ARE NOT allowed today.

1. (2 pts) If $A = (-1, 3]$ and $B = \{x \mid -2 \leq x \leq 2\}$, write the set $A \cap B$ in interval notation.

2. (8 pts) Find the solution sets of each of the following inequalities. Show all work clearly and in order, and be sure to follow the techniques we learned in class.

a. (4 pts) $2x^2 - 7x \leq -3$

b. (4 pts) $|3x + 1| \leq 4$