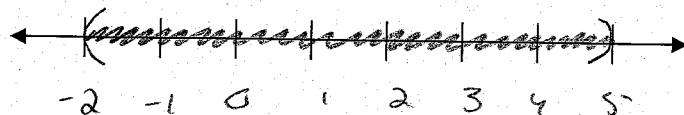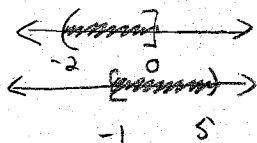# Math172 – Section 1.2: Interval Notation and Graphs

Graph each union or intersection below, and write it as a single interval, if possible. If it's not possible, write the original interval in the space provided. If the answer is the empty set, say so.

$(-2,0] \cup [-1,5)$ U = "or"

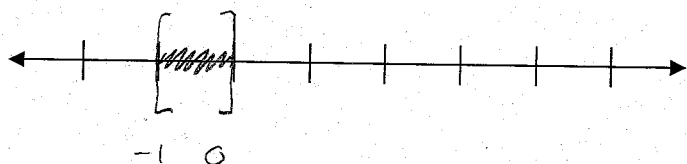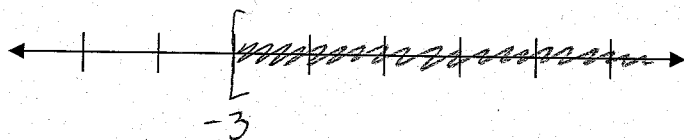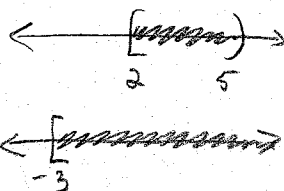$\underline{\quad (-2,5) \quad}$

$(-2,0] \cap [-1,5)$

∩ = "and"

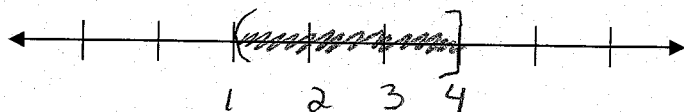so want overlap

$\underline{\quad [-1,0] \quad}$

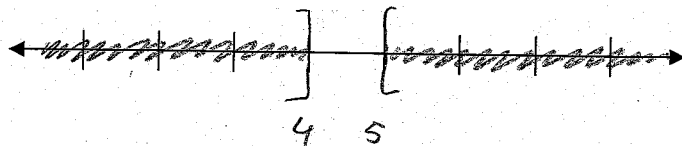$[2,5) \cup [-3,\infty)$

$\underline{\quad [-3,\infty) \quad}$

$[2,4] \cup (1,4)$

$\underline{\quad (1,4] \quad}$
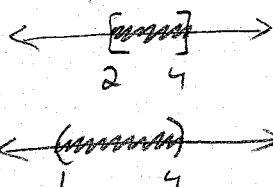
$(-\infty,4] \cup [5,\infty)$

$\underline{\quad (-\infty,4] \cup [5,\infty) \quad}$
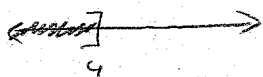
$(-\infty,4] \cap [5,\infty)$

$\underline{\quad \varnothing \quad}$
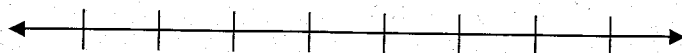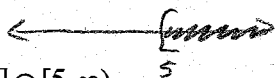
↑
deliberately left blank!