

A.1 #15 Solve $|2s| \geq 4$ and use interval notation.

Solution

Well, $|2s| \geq 4$ holds if and only if
 $2s \geq 4$ or $2s \leq -4$. So we need
either $2s \geq 4$ (or $s \geq 2$)
or $2s \leq -4$ (or $s \leq -2$).

That is, we need either $s \geq 2$ or
 $s \leq -2$. We have $s \geq 2$ for $s \in [2, \infty)$
and we have $s \leq -2$ for $s \in (-\infty, -2]$.
So we need

$$s \in (-\infty, -2] \cup [2, \infty)$$