

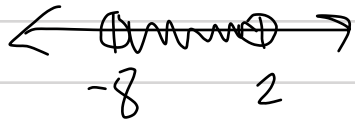
Final Review 2

Solve and Graph

Ex

① $|x+3| < 5$

$$\begin{array}{r} x+3 < 5 \text{ AND } x+3 > -5 \\ -3 \quad -3 \qquad \qquad -3 \quad -3 \\ x < 2 \text{ AND } x > -8 \end{array}$$



$|x| > \#$

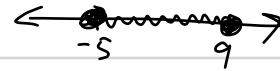
Greater OR

$|x| \leq \#$

Less than AND

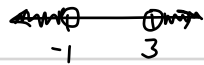
② $|x-2| \leq 7$

$$\begin{array}{r} x-2 \leq 7 \text{ AND } x-2 \geq -7 \\ +2 \quad +2 \qquad \qquad +2 \quad +2 \\ x \leq 9 \text{ AND } x \geq -5 \end{array}$$



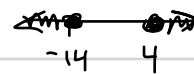
③ $|x-1| > 2$

$$\begin{array}{r} x-1 > 2 \text{ OR } x-1 < -2 \\ +1 \quad +1 \qquad \qquad +1 \quad +1 \\ x > 3 \text{ OR } x < -1 \end{array}$$



④ $|x+5| \geq 9$

$$\begin{array}{r} x+5 \geq 9 \text{ OR } x+5 \leq -9 \\ -5 \quad -5 \qquad \qquad -5 \quad -5 \\ x \geq 4 \text{ OR } x \leq -14 \end{array}$$



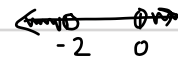
⑤ $|x+12| < 11$

$$\begin{array}{r} x+12 < 11 \text{ AND } x+12 > -11 \\ -12 \quad -12 \qquad \qquad -12 \quad -12 \\ x < -1 \text{ AND } x > -23 \end{array}$$



⑥ $|x+1| > 1$

$$\begin{array}{r} x+1 > 1 \text{ OR } x+1 < -1 \\ -1 \quad -1 \qquad \qquad -1 \quad -1 \\ x > 0 \text{ OR } x < -2 \end{array}$$



Solve

⑦ $3x-1 < 2x+8$

$$\begin{array}{r} x-1 < 8 \\ +1 \quad +1 \\ \boxed{x < 9} \end{array}$$

⑧ $4x-3 > 2x+7$

$$\begin{array}{r} 2x-3 > 7 \\ +3 \quad +3 \\ 2x > 10 \\ \frac{2x}{2} > \frac{10}{2} \\ \boxed{x > 5} \end{array}$$

perhaps partner classwork