

⑩ $|x-1| = 5x+10$ $\frac{10}{4} = \frac{5}{2}$

$x-1 = 5x+10$ OR $x-1 = -5x-10$

$-x-1 = 4x+10$ $6x-1 = -10$

$-11 = 4x+10$ $+1$ $+1$

$-11 = 4x$ $6x = -9$

$\frac{-11}{4} = \frac{4x}{4}$ $x = -9/6$

$-11/4 = x$ $3 3/4 =$ $x = -3/2$

$\frac{34}{-14-8b} = \frac{12}{-1}$

$|4-8b| = -12$

no solution

$\frac{14}{3|4w-1|-5} = 10$

$\frac{3|4w-1|}{3} = \frac{15}{3}$

$|4w-1| = 5$

$4w-1 = 5$ OR $4w-1 = -5$

Absolute Value Inequalities $|x| > 3$ $x > 3$ AND $x < -3$ Greater than creates an "OR" problem "GREATOR"

⑤ $3x+6 \geq 12$

$3x+6 \geq 12$ OR $3x+6 \leq -12$

$3x \geq 6$ $3x \leq -18$

$x \geq 2$ OR $x \leq -6$

⑥ solve $3|2x+6|-9 < 15$ Less than creates a "sANDwich"

$3|2x+6| < 24$ $|2x+6| < 8$

$2x+6 < 8$ AND $2x+6 > -8$

$2x < 2$ $2x > -14$

$x < 1$ AND $x > -7$

$\left(\text{---} \text{---} \text{---} \right)$

-7 1

$$\textcircled{1} |y-3| \geq 12$$

$$y-3 \geq 12 \quad \text{OR} \quad y-3 \leq -12$$

$$y \geq 15 \quad \text{OR} \quad y \leq -9$$



$$\textcircled{2} \frac{1}{4}|x-3| + 2 < -1$$

$$4\left(\frac{1}{4}|x-3| < -1\right)$$

$$|x-3| < -4$$

$$x-3 < -4 \quad \text{AND} \quad x-3 > 4$$

$$x < -1 \quad \text{AND} \quad x > 7$$



No Solution

complete 1.1 -1.5 packet