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Solve the compound inequality, graph the solution and then write the solution in interval notation	1. $x + 2 \leq -3$ or $x - 5 > -2$ $$\underline{-2 \quad -2} \quad \text{or} \quad \underline{+5 \quad +5}$$ $x \leq -5$ or $x > 3$ $(-\infty, -5] \cup (3, \infty)$

2. $\dfrac{x}{4} \geq 8$ or $x - 16 \leq 10$

$(4)\dfrac{x}{4} \geq 8 (4)$ $\underline{+16 \quad +16}$ $(-\infty, 26] \cup [32, \infty)$

$x \geq 32$ $x \leq 26$

3. $x + 5 > 6$ or $-6x \geq 18$

$\underline{-5 \quad -5}$ $\dfrac{-6x}{-6} \quad \dfrac{18}{-6}$
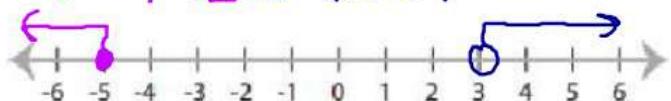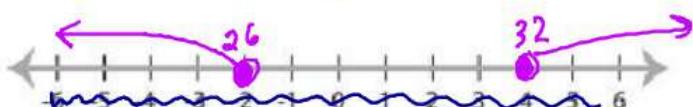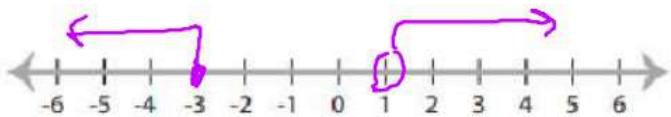
$x > 1$ $x \leq -3$

$(-\infty, -3] \cup (1, \infty)$
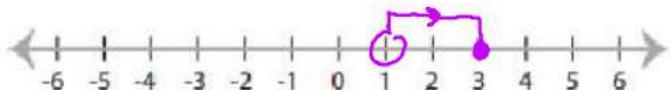
Solve the compound inequality, graph the solution and then write the solution in interval notation	1. $x+5>6$ and $\dfrac{6x}{6} \leq \dfrac{18}{6}$ $-5\ -5$ $x>1 \qquad\qquad x \leq 3$ $(1,3]$ $\xleftarrow{\qquad} \,{\scriptstyle|\atop -6}\ {\scriptstyle|\atop -5}\ {\scriptstyle|\atop -4}\ {\scriptstyle|\atop -3}\ {\scriptstyle|\atop -2}\ {\scriptstyle|\atop -1}\ {\scriptstyle|\atop 0}\ {\scriptstyle|\atop 1}\ {\scriptstyle|\atop 2}\ {\scriptstyle|\atop 3}\ {\scriptstyle|\atop 4}\ {\scriptstyle|\atop 5}\ {\scriptstyle|\atop 6}\ \xrightarrow{\qquad}$ 2. $-15 \leq x-13 \leq 0$ $+13 \qquad +13 \quad +13$ $\boxed{-2 \leq x \leq 13}$ $\begin{cases} -15 \leq x-13 \text{ and } x-13 \leq 0 \\ +13 \qquad +13 \qquad +13\ +13 \\ -2 \leq x \qquad\qquad x \leq 13 \end{cases}$ $\xleftarrow{\quad} \bullet\!\!=\!\!=\!\!=\!\!\bullet\!\!\xrightarrow{\quad}$ $-2 \qquad 13$ $[-2,13]$ $\xleftarrow{\qquad} \,{\scriptstyle|\atop -6}\ {\scriptstyle|\atop -5}\ {\scriptstyle|\atop -4}\ {\scriptstyle|\atop -3}\ {\scriptstyle|\atop -2}\ {\scriptstyle|\atop -1}\ {\scriptstyle|\atop 0}\ {\scriptstyle|\atop 1}\ {\scriptstyle|\atop 2}\ {\scriptstyle|\atop 3}\ {\scriptstyle|\atop 4}\ {\scriptstyle|\atop 5}\ {\scriptstyle|\atop 6}\ \xrightarrow{\qquad}$
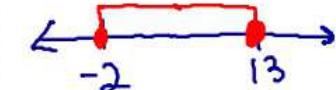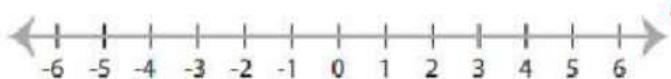
3. $^{(3)}-11 < \dfrac{x(3)}{3} < -9 \ (3)$

$-33 < x < -27$
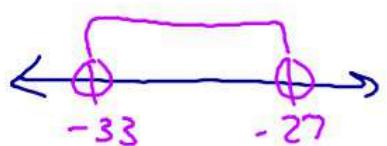
$(-33, -27)$

4. $-14 < -11 + x \le -12$

$\quad +11 \quad +11 \quad\quad +11$

$-3 < x < -1$

$(-3, -1)$