Name: _____ HW# 10

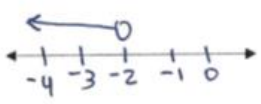
1. What step must you perform when you multiply or divide each side of an inequality by a negative number? You must flip the inequality symbol.

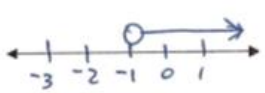
For each question below, solve the inequality, then graph it.

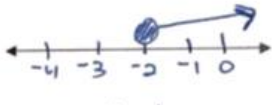
2. $-5x > 10$
$\frac{-5x}{-5} > \frac{10}{-5}$ *
$x < -2$

3. $-8y - 5 < 3$
$+5 \quad +5$
$-8y < 8$
$\frac{-8y}{-8} < \frac{8}{-8}$ *
$y > -1$

4. $-2n + 2 \leq 6$
$-2 \quad -2$
$-2n \leq 4$
$\frac{-2n}{-2} \leq \frac{4}{-2}$ *
$n \geq -2$



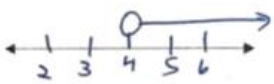


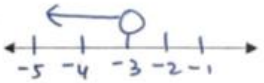


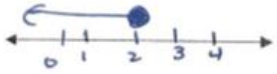
5. $10 - x < 6$
$-10 \quad -10$
$\frac{-1x}{-1} < \frac{-4}{-1}$ *
$x > 4$

6. $4 - 2x > 10$
$-4 \quad -4$
$\frac{-2x}{-2} > \frac{6}{-2}$ *
$x < -3$

7. $\frac{x}{-2} + 5 \geq 4$
$-5 \quad -5$
$\frac{x}{-2} \geq -1$ *
$x \leq 2$



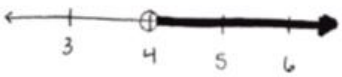




8. *MULTIPLE CHOICE:* Which graph correctly shows the solution set of $4 \geq x$?
$x < 4$.

(A)


(B)


(C)


X X > 4