Name _____ Date _____ Class _____

LESSON 12-7 **Reteach** SAW

Solving Two-Step Inequalities

Two-step inequalities can be solved by first undoing addition or subtraction, then undoing multiplication or division.

Remember to reverse the inequality symbol if you multiply or divide by a negative number.

Complete the steps to solve the inequality. Then graph the solution set.

1. $-3x + 35 > -10$

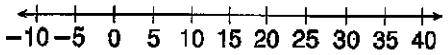
$-3x + 35$ _____ > -10 _____ ← First undo addition or subtraction.

$-3x >$ _____ ← Then undo multiplication or division.

$\frac{-3x}{-3}$ ☐ $\frac{\quad}{-3}$ ← Divide by −3. The inequality symbol is reversed.

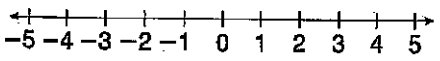
x ☐ _____

Graph the inequality.

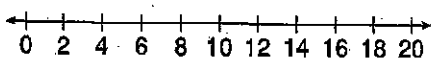


Solve. Then graph each solution set.

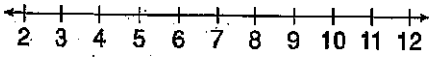
2. $7x + 32 < 18$ _____



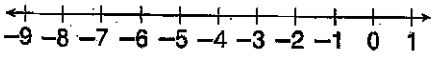
3. $\frac{t}{4} - 8 \leq -5$ _____



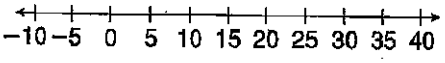
4. $6f - 6 > 48$ _____



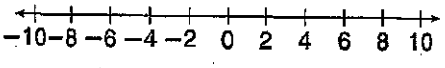
5. $-4w - 13 \geq 15$ _____



6. $\frac{k}{-5} - 6 < -9$ _____



7. $7 - 2p > -5$ _____



Name _____ Date _____ Class _____

LESSON 12-7

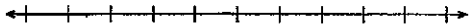
Practice A SAW

Solving Two-Step Inequalities

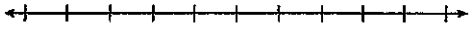
Solve. Cross out each inequality in the box that matches a solution. Then graph each solution set.

$x > 8$	$x < -8$	$x \geq -8$	$x < 8$	$x \geq 8$	$x \leq -8$

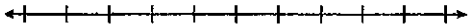
1. $3x - 5 < 19$ _____



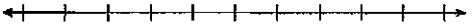
2. $-2x + 12 < -4$ _____



3. $\frac{x}{4} + 7 \geq 9$ _____

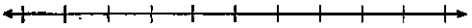


4. $\frac{x}{-2} - 3 \geq 1$ _____

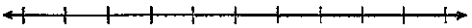


Solve. Then graph each solution set.

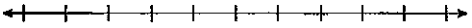
5. $7y - 8 > 6$ _____



6. $-4d + 15 \leq -1$ _____



7. $\frac{r}{-6} + 5 < 7$ _____



Name _____ Date _____ Class _____

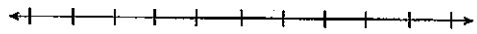
LESSON 12-7

Practice B SAW

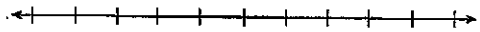
Solving Two-Step Inequalities

Solve. Then graph each solution set on a number line.

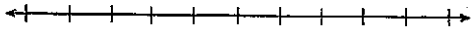
1. $5x - 8 < 17$ _____



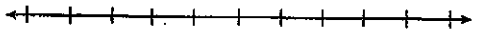
2. $\frac{r}{3} + 5 \geq 9$ _____



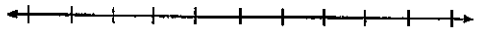
3. $-4n + 8 < -4$ _____



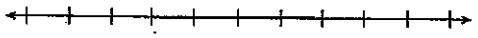
4. $\frac{z}{7} - 6 \geq -5$ _____



5. $\frac{w}{-5} + 4 < 9$ _____



6. $\frac{u}{2} - 5 \leq -9$ _____



Solve.

7. $-7d + 8 > 29$

_____

8. $4g - 18 \leq -2$

_____

9. $12 - 3b < 9$

_____

10. $\frac{a}{-4} - 7 < -2$

_____

11. $9 + \frac{c}{6} \leq 17$

_____

12. $-\frac{2}{3}p - 8 \geq 4$

_____

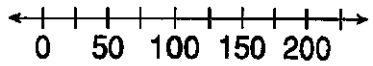
Name _____ Date _____ Class _____

LESSON 12-7 Puzzles, Twisters & Teasers SAW

1-800-HELP!

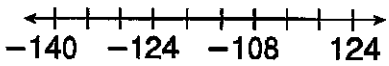
Solve each inequality. Graph each solution set on the number line. Then use the letter next to your answer to solve the riddle.

1. $\frac{x}{5} - 6 < 19$



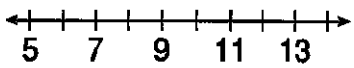
With what number did you start the graph? _____ = H

2. $\frac{y}{6} + 5 \leq -13$



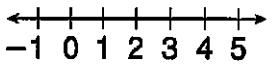
Is your circle open or closed? _____ = E

3. $-8x + 5 \leq -51$



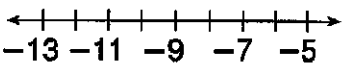
With what number did you start? _____ = I

4. $5y - 4 > -9$



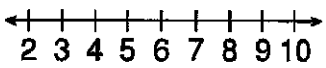
Is your circle open or filled? _____ = B

5. $\frac{x}{-3} + 8 > 11$



Is it possible for the solution to include −9? _____ = N

6. $7y - 6 \geq 22$



Is it possible for the solution to include 4? _____ = L

Why were the alien's eyes so big?

He saw his P ___ O ___ ___

125 no ●

___ ___ L ___

O 7 yes