8.18

1. What is the solution to $4(2-x) \geq -(x-5)$?

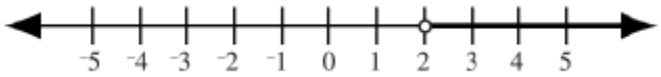
   Last year the 8th grade students sold t-shirts during a fundraiser. Let t represent the number of t-shirts sold last year. This year's 8th grade students would like to sell 40 more than twice the number of t-shirts sold last year. This year's sales should not exceed 250 shirts. What solution set represents the possible number of t-shirts sold last year? Represent this situation using one inequality statement and determine the solution set.

   a) Represent the inequality:_____

   Solution Set:_____

2. Look at the number line below.

   Which two inequalities could represent the solution set shown?



$-4(x+5) < -26 - x$	$13.5 < \frac{3}{4}x + 12$	$-\frac{1}{2}(x+4) < -1$	$-10 < \frac{1}{4}x - 18$

3. Identify all numerical values that are part of the solution set for the following inequality.

$$\frac{4x-5}{8} \geq -10 + 3x$$

-4	5	3.75
4	-3.75	0

4. What value for x makes the following inequality true? $-\frac{3}{8}x-2<-13+17$

A. -15
B. -16
C. -17
D. -18

5. The next step in solving the inequality $-y<x+2$ would be to divide both sides of the inequality by -1. Which of the following would then be true?

A. x would remain positive.
B. 2 would remain positive
C. The inequality symbol would reverse direction
D. The inequality symbol would remain the same

6. Select the statement that correctly represents the inequality below.

Three times the quotient of a number and 2 increased by 5 is at most -12.

A. $3\left(\frac{n}{2}\right)+5\le -12$

B. $\frac{3n}{2}+5\le -12$

C. $3\left(\frac{n}{2}\right)+5\ge -12$

D. $\frac{3n}{2}+5\ge -12$