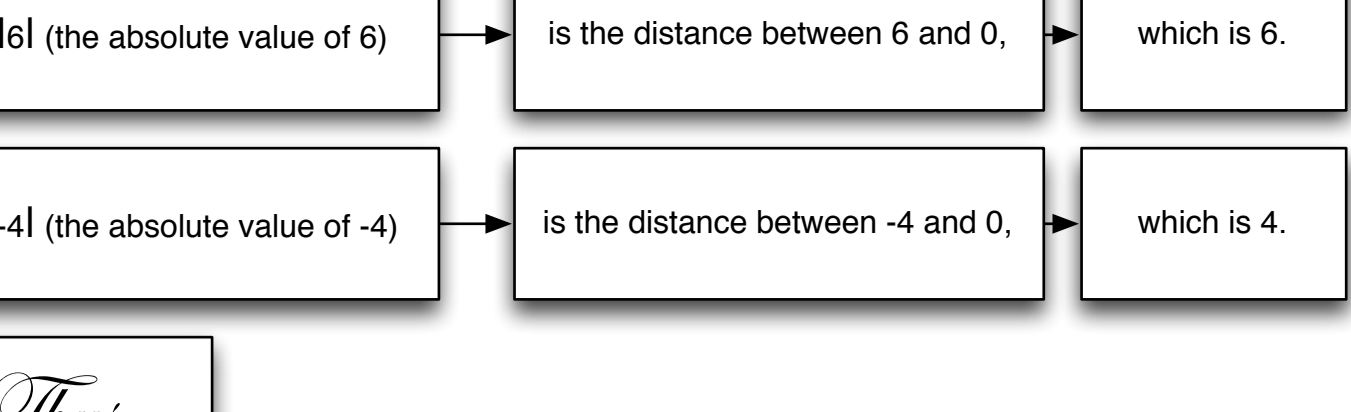


1.



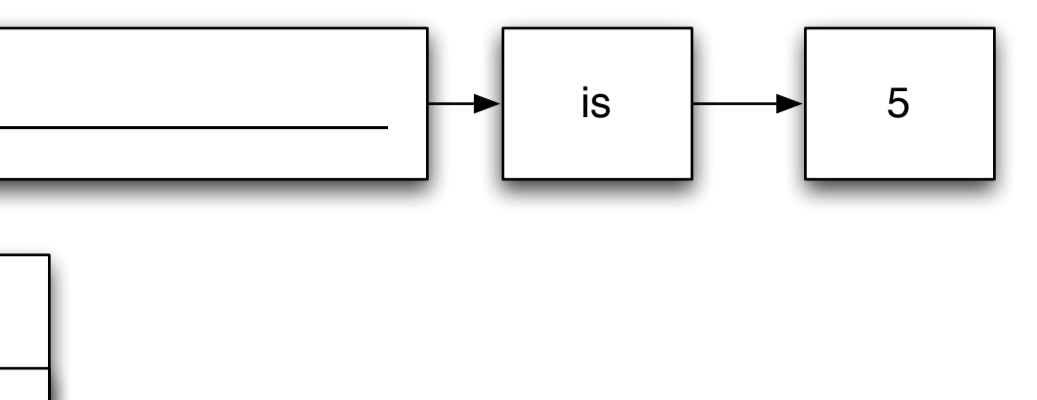
Thus...



2.

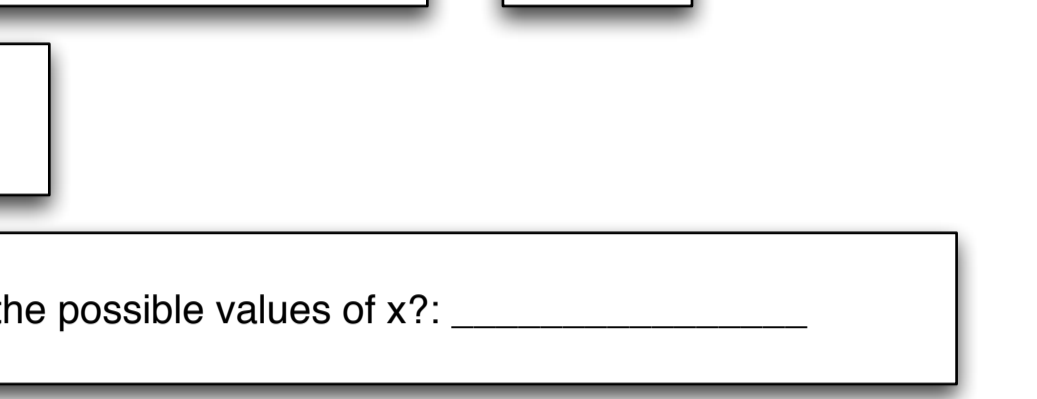


Therefore...



3.

If...



Then...

What are the possible values of x?: _____

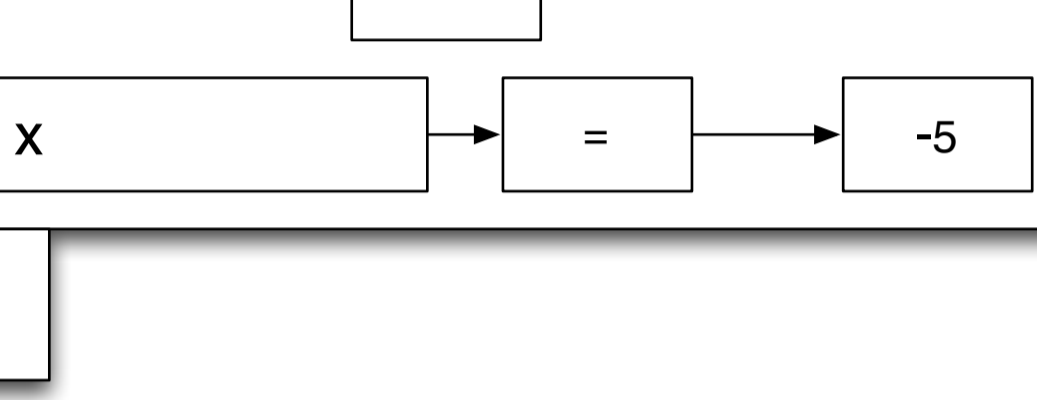
Solve the following equations.

$|x|=7$

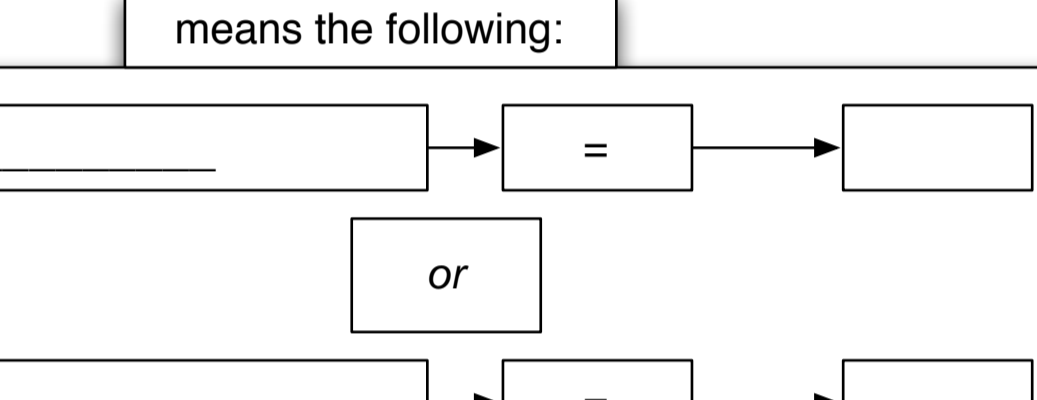
$|y|=0.4$

$|w|=3/4$

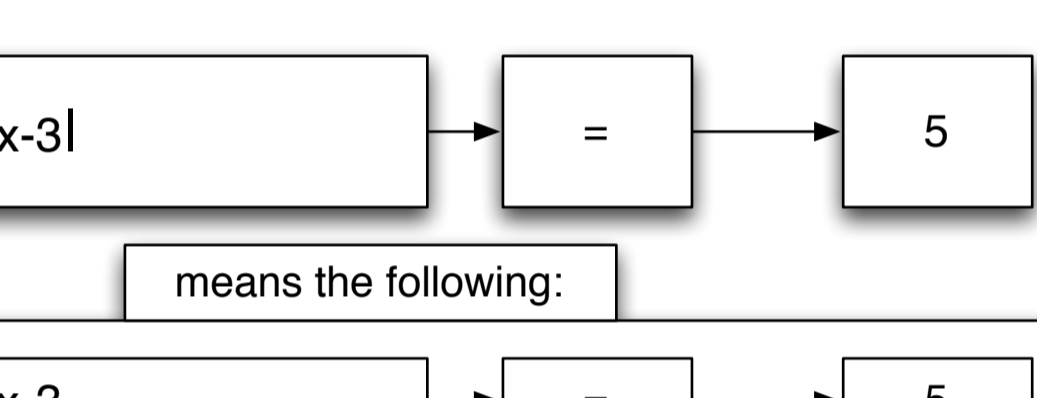
4.



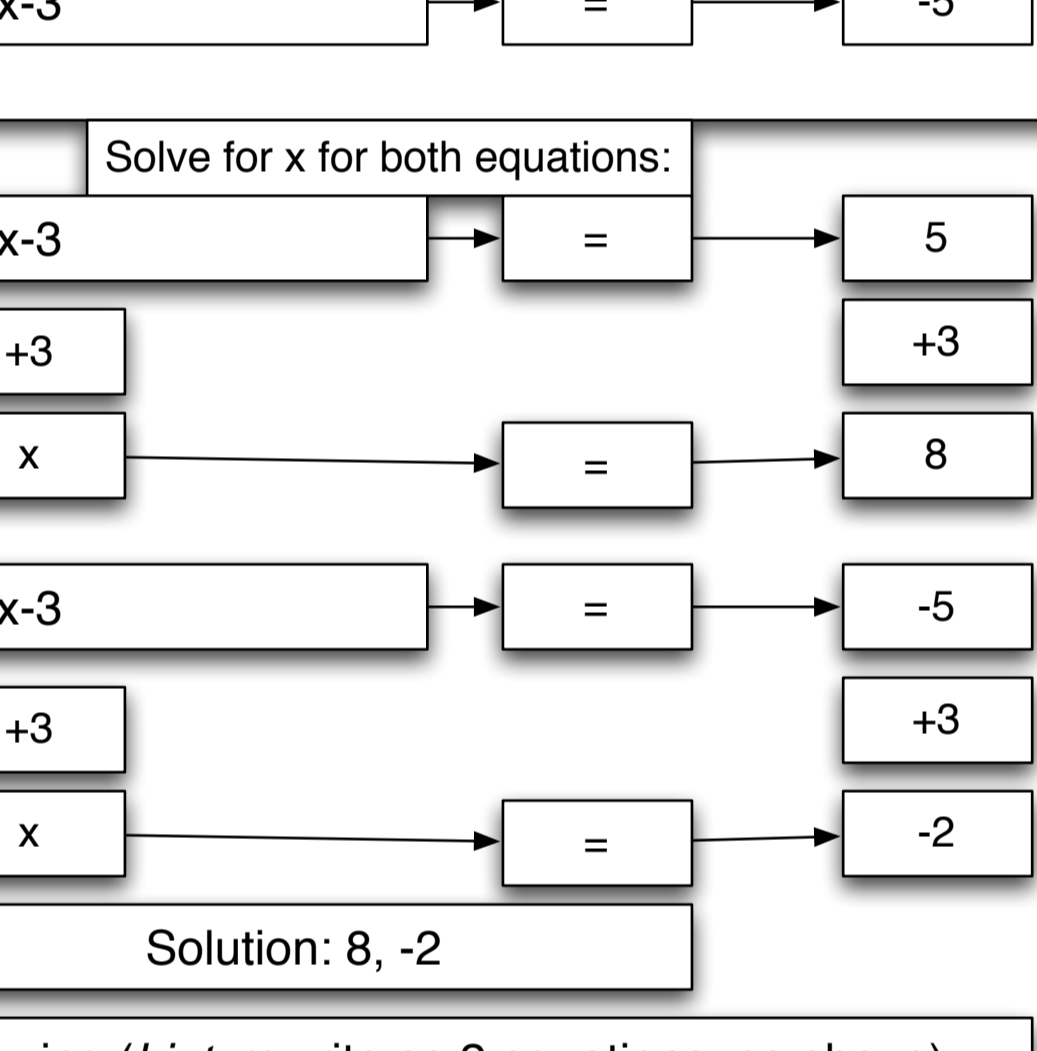
Therefore...



5.



Solve for x for both equations:



Solve the following (*hint*: rewrite as 2 equations, as above):

$|4n-5|=18$

$|f-8|=14$

$|q+8|=2$

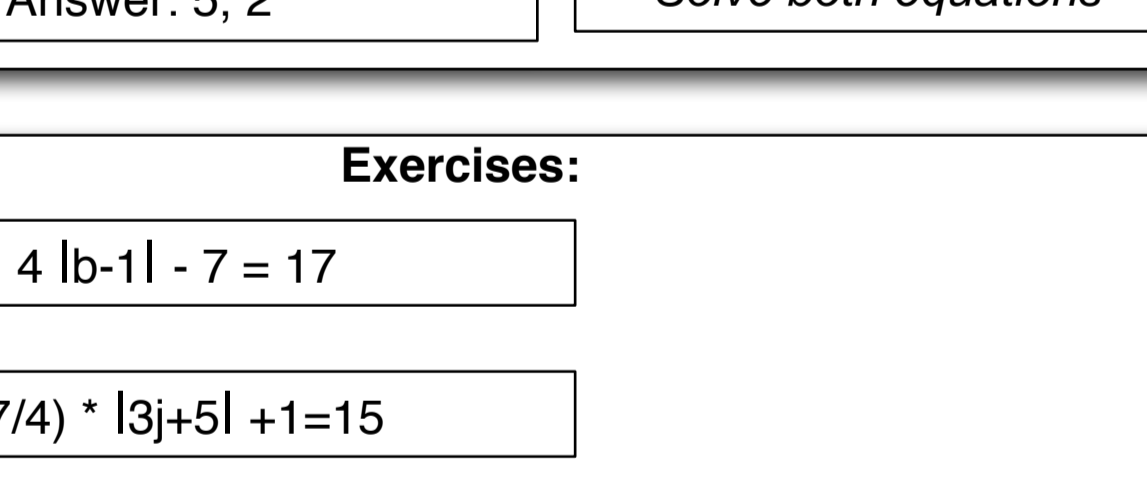
6.

To solve the following kinds of equations:

1. Isolate the absolute value algebraically

2. Solve the absolute value equation as in the last sheet.

Example:



Exercises:

$4|b-1| - 7 = 17$

$(7/4) * |3j+5| + 1 = 15$

$-3|5g+1| - 6 = -9$

7.

Some absolute value equations have **no solutions**.

$|x| = -7$

means

The distance between x and 0 is -7.

There's no such thing as negative distance.

Therefore: no solution

$|x+3| = -4$

means

The distance between (x+3) and 0 is -7.

There's no such thing as negative distance.

Therefore: no solution

Solve the following, if possible:

$|y-4| + 8 = 6$

$-5|4/5w+6| = -10$

$-4|8-5n| = 13$

$-2|1/3s-5| + 3 = 8$

8.



Therefore...

Plot that on a number line...

What compound inequality represents that number line plot?