7. 6 Solving Inequalities Using Addition or Subtraction

ESSENTIAL QUESTION: How can you use addition or subtraction to salve an inequality?

SOLVING INEQUALITIES USING ADDITION AND SUBTRACTION

1)Get $\sqrt{ariable}$ by itself by either adding or subtracting on \sqrt{bath} \sqrt{sides} just like you were solving an Q q wat son.

2) Answer will have a variable, inaquality sign and a number

3)Graph your solution on a number line.

- * < or > is an O p an circle
- *≤ or ≥ is a $\sqrt{\circ s}$ circle

EXAMPLE 1->Solve an Inequality Using Addition.

Solve the inequality. Graph the solution.

1) x - 3 > 1

2) x - 2 < 3

+2+5

3) $x - 6 \ge 4$

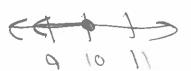


4) $10 \ge x - 1$



10 = X

X =10



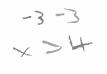
EXAMPLE 2->Solve an Inequality Using Subtraction

Solve the inequality. Graph the solution.

1)
$$15 \ge 6 + x$$



2)
$$x + 3 > 7$$





3)
$$v + 2 < 17$$

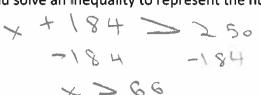
4) $16 \le m + 9$





EXAMPLE 3->Real Life Aplication

A flea market advertises that it has more than 250 vending booths. Of these, 184 are currently filled. Write and solve an inequality to represent the number of vending booths still available.



than 66 SYOM vending booths are still available.