4.4

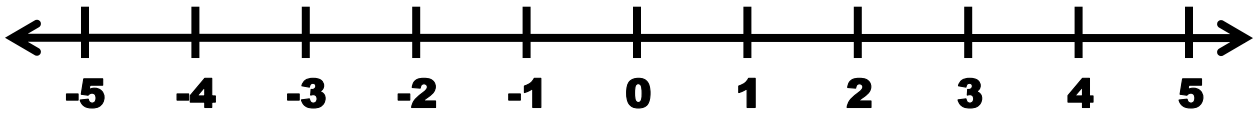
Solving Two-Step Inequalities

Review: Solving Inequalities

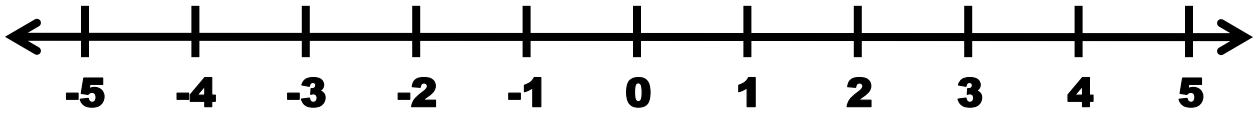
Solving inequalities is just like solving regular equations…

Solve and graph the following:

1) $t - 7 < -4$



2) $-3 < c + 2$

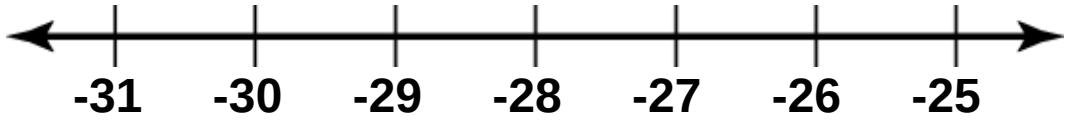


Review: Solving Inequalities

Solving inequalities is just like solving regular equations…

Solve and graph the following:

3) $\frac{d}{4} \geq -7$

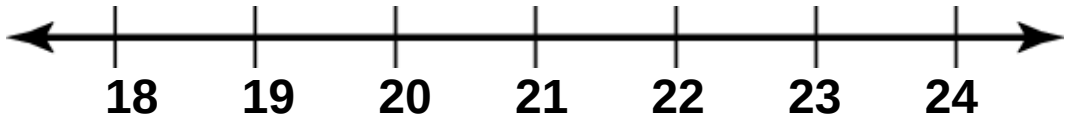


4) $-32 > 8h$

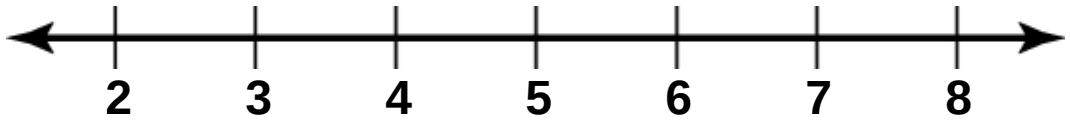
Review: Solving Inequalities

Solve and graph the following:

5) $\frac{w}{-7} \leq -3$



6) $-12n \leq -60$



Review - Solving Two-Step Equations

7) $5x - 2 = 3$

1. Cancel addition or subtraction
2. Cancel multiplication or division

Review - Solving Two-Step Equations

8) $\frac{x}{5} - 9 = -2$

1. Cancel addition or subtraction
2. Cancel multiplication or division

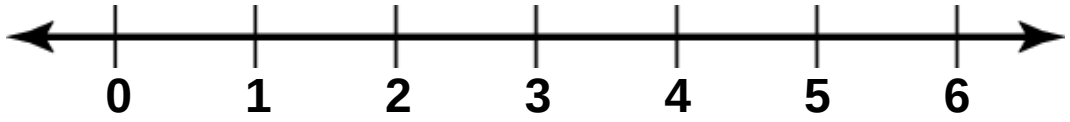
Review - Solving Two-Step Equations

$$9)\ -4(m+3)=24$$

Solving Two-Step Inequalities

a) $5x - 4 \geq 11$

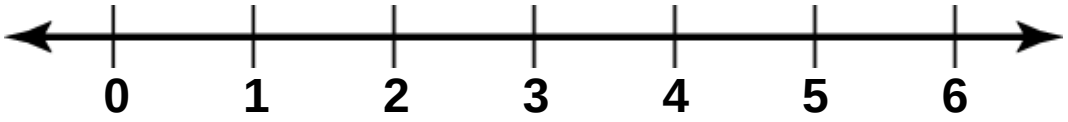
1. **Cancel addition or subtraction**
2. **Cancel multiplication or division.**
3. **Remember to change the direction of the sign if you multiply or divide both sides by a negative!**



Solving Two-Step Inequalities

b) $\frac{x}{-3} + 4 > 13$

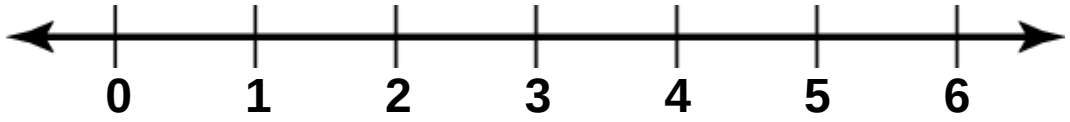
1. **Cancel addition or subtraction**
2. **Cancel multiplication or division.**
3. **Remember to change the direction of the sign if you multiply or divide both sides by a negative!**



Solving Two-Step Inequalities

$c)\ 6y - 7 > 5$

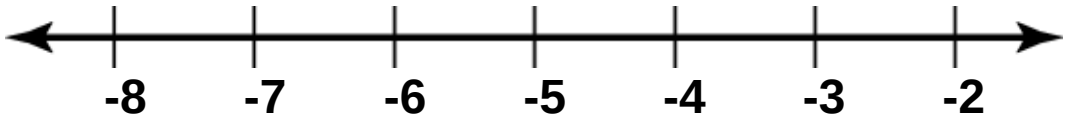
1. Cancel addition or subtraction
2. Cancel multiplication or division.
3. Remember to change the direction of the sign if you multiply or divide both sides by a negative!



Solving Two-Step Inequalities

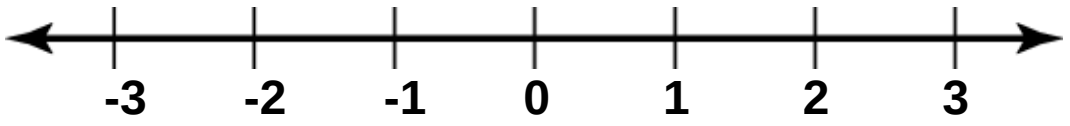
$d)\quad 2.2 - 3d > 19$

1. Cancel addition or subtraction
2. Cancel multiplication or division.
3. Remember to change the direction of the sign if you multiply or divide both sides by a negative!



Solving Two-Step Inequalities

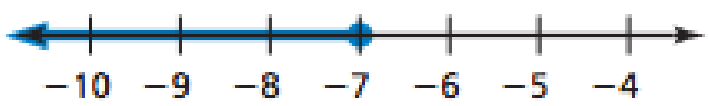
e) $-4(n-10) \leq 32$



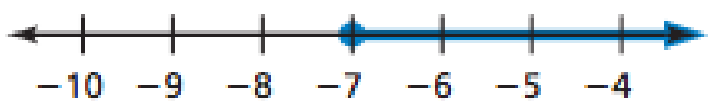
Solving Two-Step Inequalities

Which graph represents the solution of -7(x + 3) < 28?

A



B



C

D