

Name: \_\_\_\_\_

## Getting Ready | 1.9

**Ready, Set, Go!**

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**Ready**

Topic: Solve inequalities, create and solve equations.

**Solve the following inequalities for x.**

1.  $2x - 9 < 3$

2.  $4x - 3 < 13$

3.  $6x - 4 < 26$

4.  $3x - 5 \geq 10$

**Create and solve the equations for the following problems.**

5. Virginia's Painting Service charges \$10 per job and \$0.20 per square foot. If Virginia earns \$50 for painting one job, how many square feet did she paint at the job?
6. Renting the ice-skating rink for Dayne's birthday party costs \$200 plus \$4 per person. If the cost was \$324, how many people were at Dayne's birthday party?

**Set**

Topic: Solve inequalities

**Solve each inequality. Write the solution as an inequality.**

7.  $x + 15 < 12$

8.  $x - 4 \geq 13$

9.  $9x > -\frac{3}{4}$

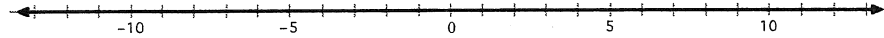
10.  $3x - 7 \geq 3(x - 7)$

11.  $x - 12 \geq 80$

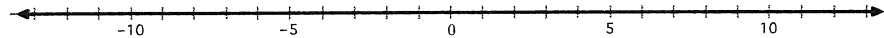
## Getting Ready | 1.9

Solve each inequality and graph the solution on the number line.

12.  $x - 2 \leq 1$

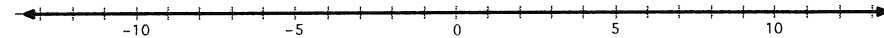


13.  $x - 8 > -20$

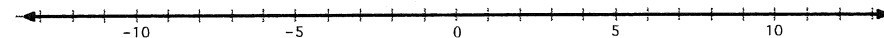


Solve each inequality. Write the solution as an inequality and graph it.

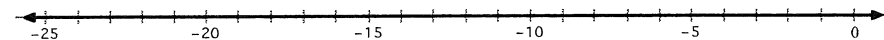
14.  $3x \leq 6$



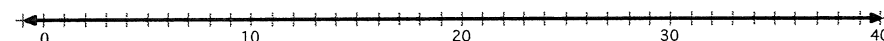
15.  $\frac{x}{5} > -\frac{3}{10}$



16.  $-10x > 150$



17.  $\frac{x}{7} \geq -5$

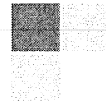


Solve each multi-step inequality.

18.  $x - 5 > 2x + 3$

19.  $\frac{3(x-4)}{12} \leq \frac{2x}{3}$

20.  $2(x - 3) \leq 3x - 2$



## Getting Ready | 1.9

## Go

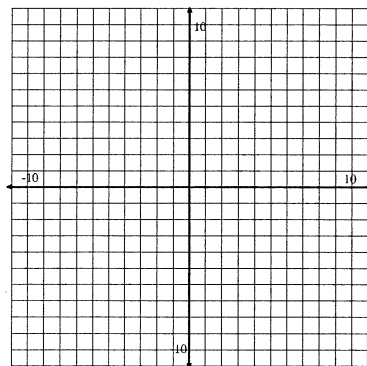
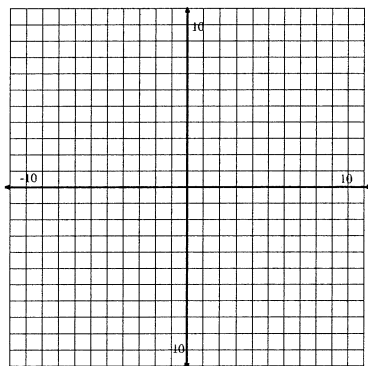
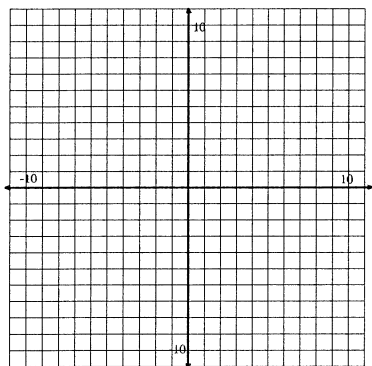
Topic: Solve systems of linear equations

Solve linear equations and pairs of simultaneous linear equations (simple, with a graph only). Justify the solution numerically.

$$21. \begin{cases} y = -x + 5 \\ -x + y = 1 \end{cases}$$

$$22. \begin{cases} x + 2y = 8 \\ 5x + 2y = 0 \end{cases}$$

$$23. \begin{cases} 3x + 2y = 12 \\ 4x - y = 5 \end{cases}$$



Need Help? Check out these related videos:

<http://www.khanacademy.org/math/algebra/solving-linear-inequalities/v/equations-and-inequalities>

<http://www.khanacademy.org/math/algebra/solving-linear-equations/v/solving-for-a-variable>

<http://www.khanacademy.org/math/algebra/systems-of-eq-and-ineq/v/solving-linear-systems-by-graphing>