Ready, Set, Go!

Ready

Topic: Solve inequalities, create and solve equations.

Solve the following inequalities for x. Then plot your solution on a number line.

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. $x - 4 \geq 13$
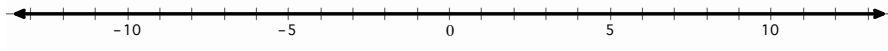
9. $9x > -\frac{3}{4}$

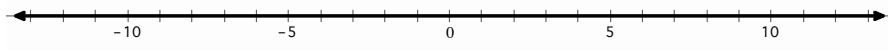10. $3x - 7 \geq 3(x - 7)$

11. $x - 12 \geq 80$

Solve each inequality and graph the solution on the number line.
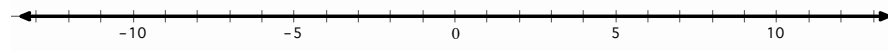
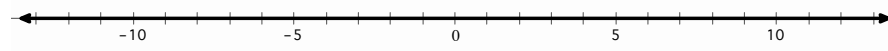12. $x - 2 \leq 1$

13. $x - 8 > -20$

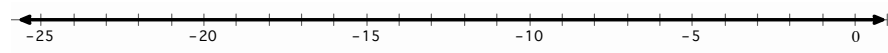**Solve each inequality. Write the solution as an inequality and graph it.**
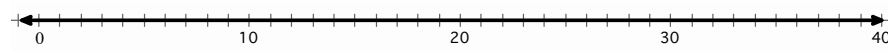
14. $3x \leq 6$

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. $\frac{3(x-4)}{12} \leq \frac{2x}{3}$
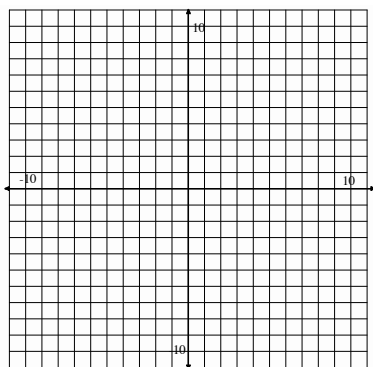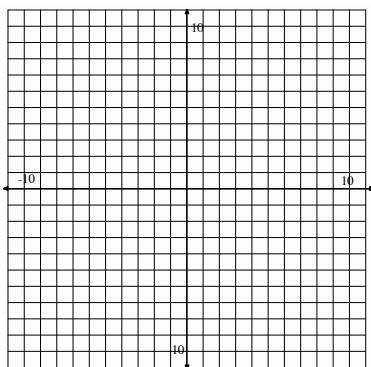
20. $2(x - 3) \leq 3x - 2$

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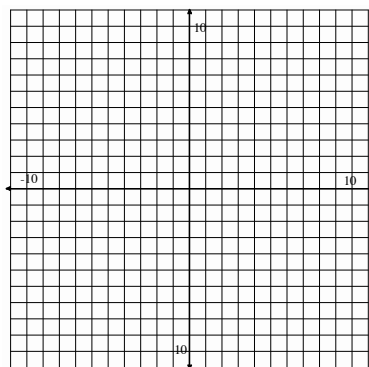
21. $\begin{cases} y = -x + 5 \\ -x + y = 1 \end{cases}$

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