

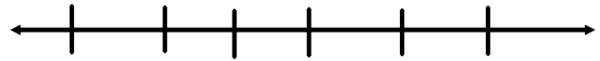
7.3 Solve Multi-Step Inequalities

NOTES

Write your questions here!

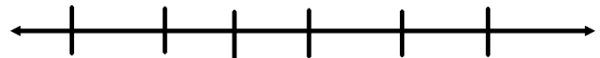


Solve $2x - 9 < 15$. Graph your solution.

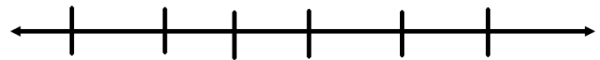


Solve and graph each.

$$12 \leq .25(4x + 8)$$

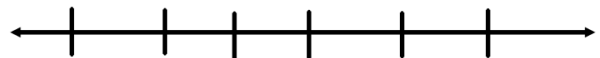


$$5x + 6 \geq 2x - 5 + 3x$$



How about this one? Anything special here?

$$2(3x - 4) > 6x + 4$$

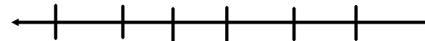


Timmykat is on the prowl. The kitten crusader has caught 5 bad guys already today and hopes to be able to catch 2.5 criminals every hour. What are possible amounts of hours that Timmykat needs to be on the prowl to catch at least 30 bad guys?

Try these...solve and graph!

1) $\frac{1}{8}(7x - 8) \geq \frac{7}{8}x + 2$

2) $-5x - 8 < 32$



SUMMARY:

Now,
summarize
your notes
here!

7.3 Solve Multi-Step Inequalities

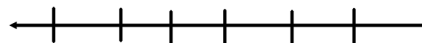
PRACTICE

Directions: Solve the inequality. Graph your solution.

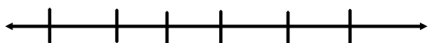
1) $-2x - 3 > 7$



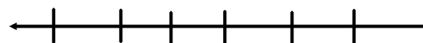
2) $-8v - 3 \geq -11$



3) $7(r - 3) \geq -13$

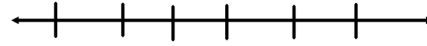
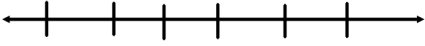


4) $4 - 2m > 7 - 3m$



5) $-10p > 6p - 8$

6) $\frac{2}{3}d - 2 < \frac{1}{3}d + 8$



Directions: Describe and correct the error in solving the inequality.

7) $17 - 3x \geq 56$
 $-3x \geq 39$
 $x \geq -13$

Directions: Solve the inequality, if possible.

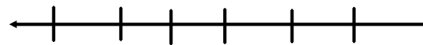
8) $3p - 5 > 2p + p - 7$

9) $5(b+9) \leq 5b + 45$

10) $2.2h + 0.4 \leq 2(1.1h - 0.1)$

Directions: Translate the verbal phrase into an inequality. Then solve the inequality and graph your solution.

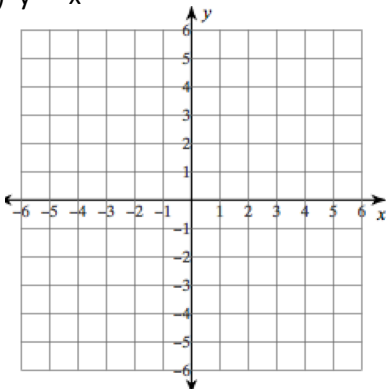
11) Four more than the product of 3 and x is less than 40.



Skillz Review

Graph the line.

1) $y = -x$



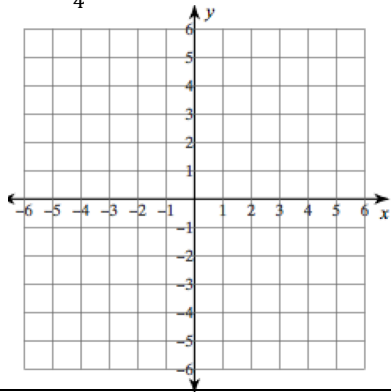
Evaluate.

2) $b^5 - 2a^2$, when $a = 5$ and $b = -2$

Solve.

3) $3x - 3(x - 6) = 32 + 2x$

$$4) y = -\frac{3}{4}x + 4$$



$$5) -3x^3 + 2x^2, \text{ when } x = -2$$

$$6) -6m + 6 + 6 = 4 - 7m$$

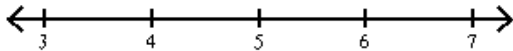
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APPLICATION

Solve and graph each inequality.

$$1) -8 + 2v < 2$$

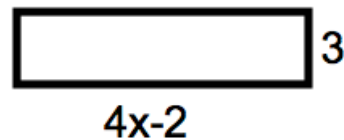
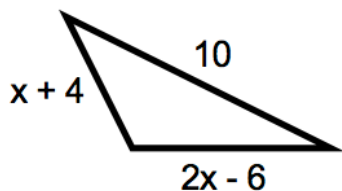
$$2) -12m - 8 \leq -5m - 7m$$



Directions: Write and solve an inequality to find the possible values of x .

$$3) \text{ Perimeter} > 50$$

$$4) \text{ Area} < 138$$



5) So far you have a MP3 Player with 0.5 GB of music already stored on the MP3 player and know that each song is about 0.002 GB of memory. What are the possible numbers of additional songs that you can put on the MP3 player if it holds at most 2 GB?