Curriculum Outcome

PR1: . Generalize a pattern arising from a problem-solving context using linear equations and verify by substitution.

PR3. Model and solve problems using linear equations of the form:

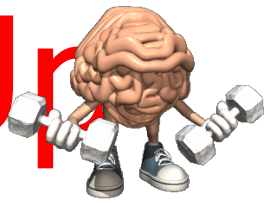
ax = b; = b , a ≠ 0; *ax + b = c*; +*b = c*, a ≠ 0; = *b*, *x* ≠ 0 ax ax xa
ax+ b = cx + d; a(bx + c) = d(ex + f); a(x + b) = c; ax = b+*cx*

concretely, pictorially and symbolically, where*a, b, c, d, e, and f* are rational numbers

Student Friendly: Replacing the equal sign with an inequality sign (ie. <, >)

Feb 15-7:58 AM

Warm-Up



1) $\frac{1}{3}(15 + 3r) = \frac{2}{5}(15 - 5r)$

$r = \frac{1}{3}$

2) $3u + 6 - 5u = 17 + 4u - 6$

$u = -\frac{5}{6}$

Feb 28-12:12 PM

Warm-Up

1) $\frac{1}{3}(15 + 3r) = \frac{2}{5}(15 - 5r)$

$\frac{15}{3} + \frac{3r}{3} = \frac{30}{5} - \frac{10r}{5}$

$5 + r = 6 - 2r$ (+2r, +2r)

$5 + 3r = 6$ (−5, −5)

$\frac{3r}{3} = \frac{1}{3}$

$r = \frac{1}{3}$

Feb 28-12:12 PM

2) $3u + 6 - 5u = 17 + 4u - 6$

$-2u + 6 = 11 + 4u$ (+2u, +2u)

$6 = 11 + 6u$ (−11, −11)

$\frac{-5}{6} = \frac{6u}{6}$

$u = -\frac{5}{6}$

Feb 20-8:42 AM

Class/Homework

Any Questions????

Last nights homework

Text book questions

or worksheet questions

Feb 24-9:54 PM

Class/Homework

Class work and homework

Mid-Unit Review

page 286
Questions: 3,4,5, 7, 8,

Worksheet questions

1, 5, 13, 17, 19, 21, 23, 25, 27

Feb 24-9:54 PM

Warm Up

Quiz Time

Feb 11-7:47 AM

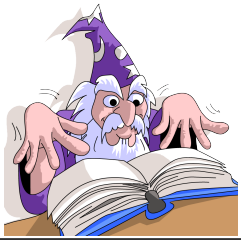
Section 6.3

Introduction to Linear Inequalities

Tallest man
7 feet 9 inches
or 2.36m tall
>
Smallest man
29 inches
or 0.74m tall

What is an inequality?

We use inequalities to model situations that can be described by a range of numbers instead of a single number.



"Pick a number greater than 7."

$x > 7$

Feb 28-10:49 AM

When one quantity is....

less than $<$

greater than $>$

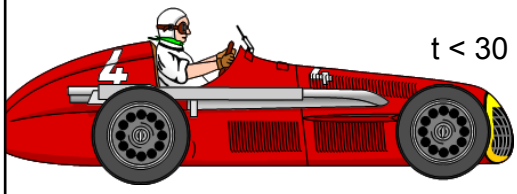
less than or equal to $\leq$

greater than or equal to $\geq$

Which of these inequalities describes the time, t minutes, for which a car could be legally parked?

$t > 30$ $t \geq 30$

$t < 30$ $t \leq 30$



Feb 28-11:28 AM

Define a variable and write an inequality for each of the following situation:

Variable: x

Inequality: $x \leq 55$

Variable: y

Inequality: $y < 4$

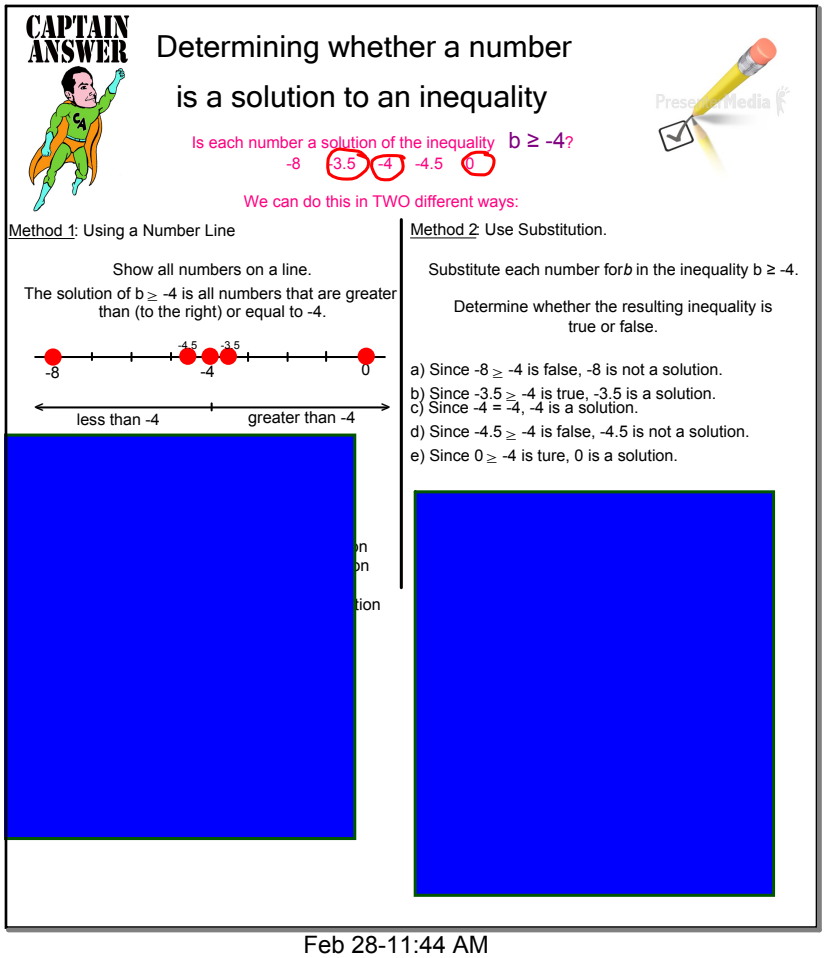
Variable: a

Inequality: $a \geq 102$

Variable: b

Inequality: $b \geq 14$

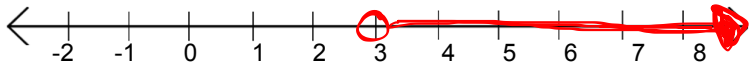
Feb 28-11:34 AM



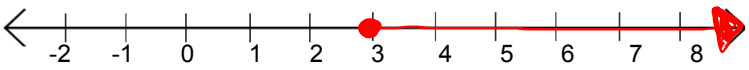
Feb 28-11:44 AM

Graphing inequalities

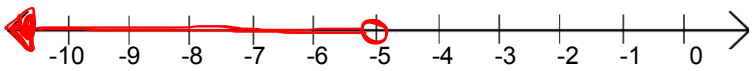
$a > 3$



$a \geq 3$



$b < -5$



$b \leq -5$

Feb 28-11:48 AM

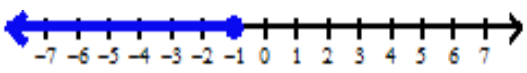
$x + 3 > 5$ (−3 on both sides)

$x > 2$

Feb 20-9:10 AM

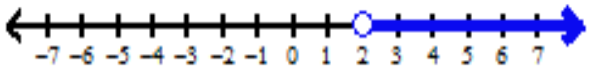
Write the inequality given by the following graph.

1)



$y \leq -1$

2)

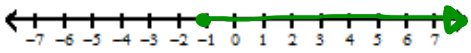


$x > 2$

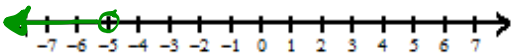
Mar 15-7:29 PM

You try

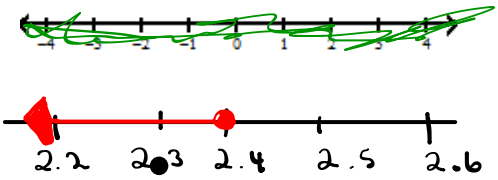
1) $k \geq -1$



2) $x < -5$



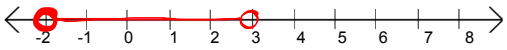
3) $a \leq 2.4$



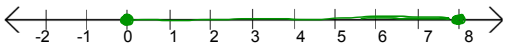
Mar 15-7:27 PM

Graphing inequalities

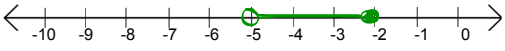
$-2 < p < 3$



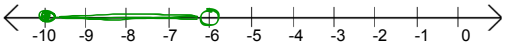
$0 \leq a \leq 8$



$-5 < t \leq -2$



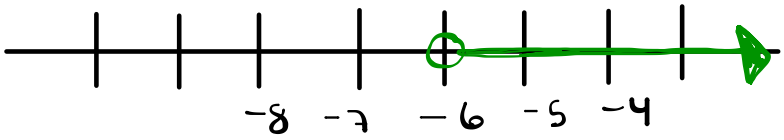
$-10 \leq g < -6$



Feb 28-11:48 AM

$-6 < t$

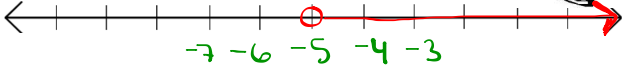
$t > -6$



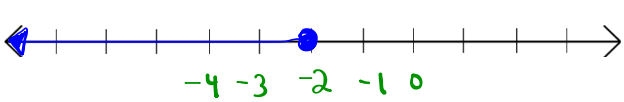
Mar 14-9:06 AM

Graph each inequality on a number line.

a) $t > -5$

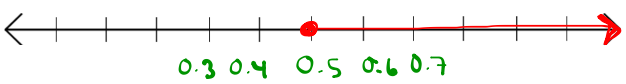


b) $-2 \geq x$



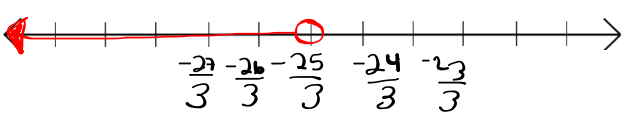
$x \leq -2$

c) $0.5 \leq a$



$a \geq 0.5$

d) $p < -\frac{25}{3}$



Mar 15-9:51 AM

$x \neq 3$

x does not equal 3

Feb 20-9:31 AM

Class/Homework

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Questions: 3(aceg), 4, 7(ac) ,8,9,

12,13(aceg)

Mar 15-8:14 PM