Algebra 1 Review Ch. 5
Quiz Thurs 5.3-5.4

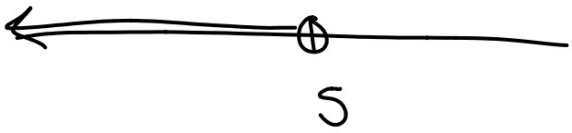
Test is Fri. (MCT 5.1-5.4)!

Example 1

Solve $x - 9 < -4$. Then graph it on a number line.

$+9 \quad +9$

$x < 5$



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Example 2

Solve $-14h < 56$. Check your solution.

$-14 \quad -14$

$h > -4$

-4

$-14 \cdot 0 < 56$

$0 < 56$

Example 3

Solve $-6y - 13 > 29$. Check your solution.

$+13 \quad +13$

$-6y > 42$

$\frac{-6y}{-6} > \frac{42}{-6}$

$y < -7$

Whiteboards

$-6 \cdot -10 - 13 > 29$

$60 - 13 > 29$

$47 > 29$

n = number

29. Four times a number decreased by 6 is less than -2. Define a variable, write an inequality, and solve for the number.

$$4n - 6 < -2$$
$$+6 \quad +6$$

$$\frac{4n}{4} < \frac{4}{4}$$

$$n < 1$$

12. $5b - 1 \geq -11$

13 $21 > 15 + 2a$

16. $-a + 6 \leq 5$

17. $37 < 7 - 10w$

n = a number

Define a variable, write an inequality, and solve each problem. Check y

22. Three fourths of a number decreased by nine is at least forty-two.

$$\frac{3}{4}n - 9 \geq 42$$

$$+9 \qquad +9$$

$$\frac{4}{3} \cdot \frac{3}{4}n \geq 51 \cdot \frac{4}{3}$$

$$n \geq 68$$

23. Two thirds of a number added to six is at least twenty-two.

$\frac{2}{3}n + 6 \geq 22$

26. Ten is no more than 4 times the sum of twice a number and three.

CCSS **STRUCTURE** **Solve each inequality. Graph the solution on a number line.**

29. $-3(7n + 3) < 6n$

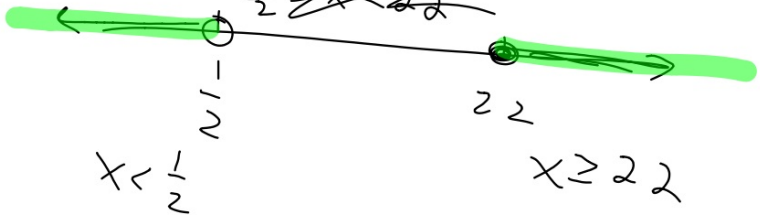
30. $21 \geq 3(a - 7) + 9$

$2n+5<6$ or $n-3\geq 19$

$-5 \quad -5$ $\qquad +3 \quad +3$

$\frac{2n}{2} < \frac{1}{2}$ $\qquad n \geq 22$

$n < \frac{1}{2}$



$\frac{1}{2}$ $\qquad 22$

$x < \frac{1}{2}$ $\qquad x \geq 22$

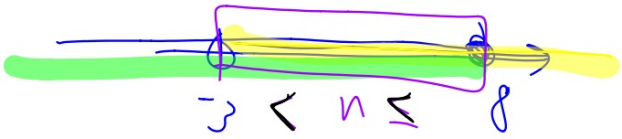
$$2n-1 < 3n+2 \leq n+18$$

$$2n-1 < 3n+2 \quad \text{and} \quad 3n+2 \leq n+18$$

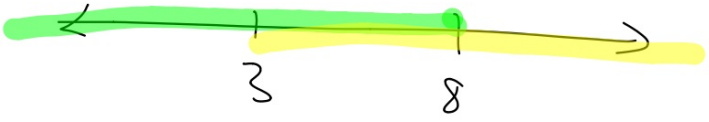
$$-2n-2 \quad -2n-2 \qquad -n-2 \quad -n-2$$

$$-3 < n \qquad \frac{2n}{2} \leq \frac{16}{2}$$

$$n > -3 \quad \text{and} \quad n \leq 8$$



$$-3 < n \leq 8$$



and $3 < x < 8$

or all real numbers and

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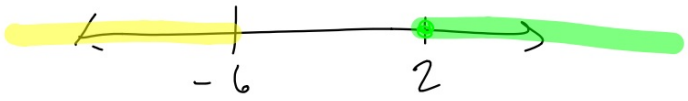

p 304 1-27 odd

p 308 8, 10, 12