Quiz 5.1-5.2

Algebra 1 5.3

Solve multi-step linear inequalities

Use the distributive property to solve linear inequalities

distributive property

inequality

empty set NS

all real numbers

anything

Whiteboards

$<$ $\leq$

$>$ $\geq$

0 $\bullet$

$0 > 12$

$6 > 1$

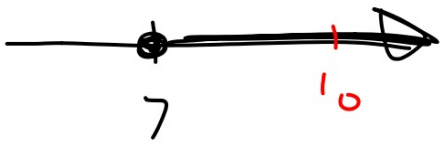
3 $6h - 10 \geq 32$

Solve, graph, check

$+10 \quad +10$

$\frac{6h}{6} \geq \frac{42}{6}$

$h \geq 7$



$6 \cdot 10 - 10 \geq 32$

$60 - 10 \geq 32$

$50 \geq 32$

4. $-3 \leq \frac{2}{5}r + 9$

6. $4m - 17 < 6m + 25$

$-6m \qquad -6m$

$-2m - 17 < 25$

$+17 \qquad +17$

$\frac{-2m}{-2} < \frac{42}{-2}$

$m > -21$

9. $-6 \leq 3(5v - 2)$

10. $-5(g + 4) > 3(g - 4)$

What is the letter you are using?
What is the relationship? (< > =?)
Write the inequality and solve.

Define a variable, write an inequali[redacted] each problem. Then check your solution.

7. Four times a number minus 6 is greater than eight plus two times the number.

n = a number

$4n - 6 > 8 + 2n$

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

$2n - 6 > 8$

$+6 \quad +6$

$\frac{2n}{2} > \frac{14}{2}$

$n > 7$

$4 \cdot 50 - 6 > 8 + 2 \cdot 50$

$200 - 6 > 8 + 100$

$194 > 108$

n = a number

8. Negative three times a number plus 4 is less than five times the number plus 8.

$$-3n + 4 < 5n + 8$$

at most

$\leq$