

Look at the Math 7 Review (Answer Key) for all answers that are blank!

Name: Answer Key

Date: 11/16

### Inequalities Test Review (Math 7)

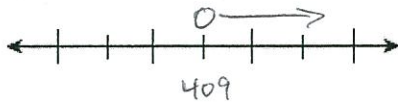
Write an inequality for each situation described below.

1. Today's attendance (a) will be at least 250 people. \_\_\_\_\_
2. Last weekend, there were more than 75 birds (b) in the sanctuary. \_\_\_\_\_
3. You can walk there in 20 minutes (m) or less.  $m \leq 20$
4. Is -1 a solution to the following inequality:  $-5x + 3 < 38$ ? \_\_\_\_\_
5. Is 3 a solution to the following inequality:  $2x - 5 \geq 1$ ? \_\_\_\_\_

Solve and graph each of the following inequalities.

6.  $k - (-178) > -231$

$$\begin{array}{r} k + 178 > -231 \\ -178 \quad -178 \\ \hline k > 409 \end{array}$$



7.  $\frac{k}{-8} < 13$



8.  $-8.7 \leq -2g + (-4.9)$



9.  $3.3 + 3.2n \leq -1.5$

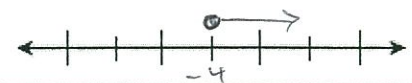


10.  $-10 \geq -18 + \frac{m}{6}$



11.  $-6 + -4g + (-12) \leq -2$

$$\begin{array}{r} -6 - 4g - 12 \leq -2 \\ -18 - 4g \leq -2 \\ +18 \quad +18 \\ \hline -4g \leq 16 \\ -4 \quad -4 \\ \hline g \geq -4 \end{array}$$



12.  $50 \geq -2(5g + 10)$

$$\begin{array}{r} 50 \geq -10g - 20 \\ +20 \quad +20 \\ \hline 70 \geq -10g \\ -10 \quad -10 \\ \hline -7 \geq g \\ g \leq -7 \end{array}$$



13.  $12 + \frac{a}{-4} - 19 > -2$



14.  $-3(k - 5) \leq -42$

$$\begin{array}{r} -3k + 15 \leq -42 \\ -15 \quad -15 \\ \hline -3k \leq -57 \\ -3 \quad -3 \\ \hline k \geq 19 \end{array}$$



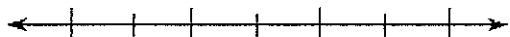
Define a Variable (V), Write an Inequality (I), and Solve (S), and graph each Inequality to represent the solution set.

15. Negative eight plus four times a number is greater than negative 64. What is the solution set for this number?

V: \_\_\_\_\_

I: \_\_\_\_\_

S: \_\_\_\_\_

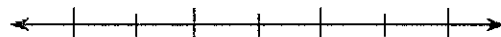


16. A ride at an amusement park requires a height of at least 48 inches. Your little brother is 37 inches tall. What is the solution set for how many more inches must he grow in order to go on the ride?

V: \_\_\_\_\_

I: \_\_\_\_\_

S: \_\_\_\_\_

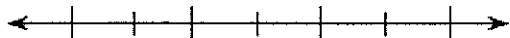


17. The difference of four times a number and -8 is greater than -120. What is the solution set for the number?

V: \_\_\_\_\_

I: \_\_\_\_\_

S: \_\_\_\_\_

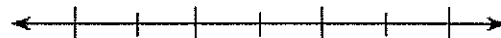


18. Your mom gave you \$25 to go to the movies. You spend \$8 on your ticket and \$5 on a small bag of popcorn. You want to spend the rest of your money on boxes of candy to share with your friends. If each box of candy costs \$3, what solution set represents the number of boxes of candy you can buy?

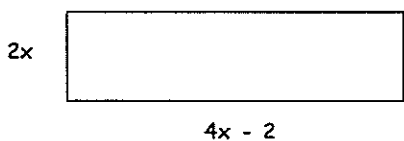
V: \_\_\_\_\_

I: \_\_\_\_\_

S: \_\_\_\_\_



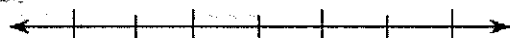
19. What must the value of  $x$  be so that the perimeter of the rectangle is at least 44 cm?



V: \_\_\_\_\_

I: \_\_\_\_\_

S: \_\_\_\_\_



20. Sondra has \$207 to spend on new school clothes. First, she purchased a pair of shoes for \$45. The store was charging \$18 for all shirts, pants, and other items of clothing. What solution represents the number of items of clothing that she can purchase?

V: \_\_\_\_\_

I: \_\_\_\_\_

S: \_\_\_\_\_

