

Algebra 1: Bellwork

1. Start working on your quiz. You will have 20 minutes to complete the problems. You may use a calculator.
2. Once you are done with your quiz, bring it to me and make sure you have your composition book and a calculator and be ready after the 20 minutes is over.
3. BONUS QUESTION FOR THE QUIZ: (DO THIS QUESTION ON THE BACK)

$$7x - 10 = 3x + 14$$

Main Ideas/Questions	Notes/Examples
Steps to Solve	① Simplify each side
	② Move a variable
	③ Solve two step equation
	④ Check your answer

$$1. 5y - 8 = 3y + 12$$

$$\begin{array}{r} -3y \quad -3y \\ \hline \end{array}$$

$$2y - 8 = 12$$
$$+8 \quad +8$$

$$2y = 20$$

$$y = 10$$

$$2. -6x + 14 = 12 - 8x$$

$$\begin{array}{r} +8x \quad +8x \\ \hline \end{array}$$

$$2x + 14 = 12$$
$$-14 \quad -14$$

$$2x = -2$$

$$x = -1$$

$$3. 7k = 3k - 36$$

$$\begin{array}{r} -3k - 3k \\ \hline \end{array}$$

$$4k = -36$$
$$\frac{4k}{4} = \frac{-36}{4}$$

$$k = -9$$

$$4. 12 - 2u = 9u + 45$$

$$\begin{array}{r} -9u - 9u \\ \hline \end{array}$$

$$12 - 11u = 45$$
$$-12 \quad -12$$

$$-11u = 33$$

$$u = -3$$

$$12 = 11u + 45$$
$$\begin{array}{r} -45 \quad -45 \\ \hline -33 = 11u \end{array}$$

$$u = -3$$

5. $11 - m = 51 - 6m$

6. $-10k + 1 = 40 - 7k$

~~+10k~~ +10k
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$40 + -7k$

$1 = 40 + 3k$

-40 -40
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$-39 = 3k$

$k = -13$

7. $3(6p - 1) = 11p - 45$

8. $2(4w - 1) = -10(w - 3) + 4$

9. $9(m-3) + 3m = 7m + 43$

$$9m - 27 + 3m = 7m + 43$$

$$12m - 27 = 7m + 43$$

$$\begin{array}{r} -7m \qquad -7m \\ \hline \end{array}$$

$$5m - 27 = 43$$

$$\begin{array}{r} +27 \quad +27 \\ \hline \end{array}$$

10. $-16 - 7(2a + 3) = 23 - 2a$

$$5m = 70$$

$$m = 14$$

11. $5x - (x - 18) = 6 - 2(x + 15)$

12. $8(y + 4) - 2(y - 1) = 70 - 3y$