5.2 Two Step Equations

NOTES

ALGEBRA 2

Write your questions here!

Identify what operations are being performed on the variable.

1)

2)

Grouping
Exponents
Multiply
Divide
Add
Subtract

No time to rest on the job! Let's solve this equation!

3)

Solve and check!

4)

5)

YOU TRY!!!!

6)

SUMMARY:

Now, summarize your notes here!

5.2 Two Step Equations

PRACTICE

Directions: Circle all the operations that are being performed on the variable. Indicate the number performing each operation. Do NOT solve the equation!		
1) $12.5 = 2.3x - 8.7$ Grouping Exponents Multiply Divide Add Subtract	2) $\frac{x}{3} + 5 = 10$ Grouping Exponents Multiply Divide Add Subtract	3) $17 - x = 15$ Grouping Exponents Multiply Divide Add Subtract
Directions: Solve and check.		
4) $-13.61 = \frac{b}{3.4} - 9.11$	5) $6x - 14 = -2$	6) $-2 = 5 - \frac{m}{3}$
7) $-13.27 = -2.2 - 4.1h$	8) $10 - 8x = 18$	9) $\frac{k}{2} + 12 = 7$

10) $5 - v = -12$	11) $7f + 8 = -13$	12) $9 = 12 - \frac{g}{4}$

Directions: Sully solved the following. Check his solution to see if it is correct. If incorrect, find the correct solution.

13) Sully says $n = 8$.

$$4 + \frac{x}{4} = 2$$

14) Sully says $n = -3$.

$$-8 = -2 + 2n$$

Directions: Brust solved the following equations. He DEFINITELY made some mistakes! Using complete sentences explain his mistake and then find the correct solution.

15)

$$\begin{array}{r} 8 - 2x = -10 \\ -8 \quad = -8 \\ \hline 2x = -18 \\ 2 \; = \; 2 \\ \hline x = -9 \end{array}$$

16)

$$\begin{array}{r} 5x - 3 = 12 \\ +3 \; = +3 \\ \hline 5x = 15 \\ -5 = -5 \\ \hline x = 10 \end{array}$$

5.2 Two Step Equations

WRAP UP

Directions: Circle all the operations that are being performed on the variable. Indicate the number performing each operation.	**Directions: Solve and check.**
1) Grouping Exponents Multiply Divide Add Subtract	2) $5 - \frac{b}{2} = 1$

3) Translate each of the following into a mathematical equation.

a. Four times an unknown number, y, plus eight equals twelve.

b. Fifteen is the same as the sum of 5 and twice an unknown number, g.

c. Brust starts with two oranges in his grove. He gains three more oranges every day. How many days until he has 22 oranges?

4) The perimeter of the rectangle shown below is 66 meters.

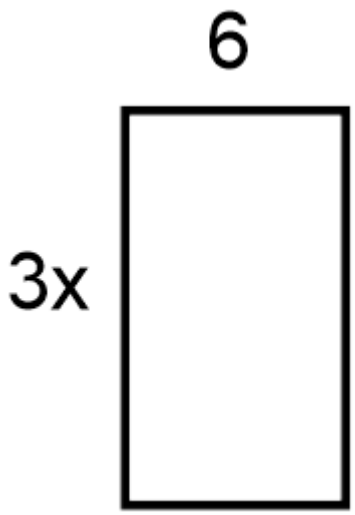
Part A
Which equation represents the perimeter of the rectangle?

(A) $3x + 6 = 64$

(B) $6x + 6 = 64$

(C) $6x + 12 = 64$

(D) $9x + 12 = 64$



PART B
Solve the equation.

EXIT TICKET –

Mr. Brust solves his equations really WONKY. Look below and first describe what Mr. Brust did first. Then decide if he still got the correct answer.

$\left(-2 = 5 - \frac{m}{3}\right)3$

$-6 = 15 - m$

$-15 \quad -15$

$\frac{-21}{-1} = \frac{-m}{-1}$

$21 = m$