## Math 8 Unit 2 PreTest - Solving Linear Equations

\_\_\_\_/ 38 points

## Multiple Choice.

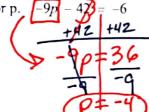
1. (1 point) Solve the equation. w + 12 = 26

2. (1 point) Find the solution  $\frac{k}{2} = -27(-2)$ 

A. 
$$\frac{27}{2}$$

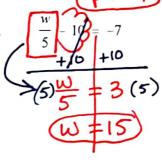
3. (1 point) Solve for p.



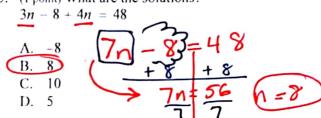


4. (1 point) Solve.

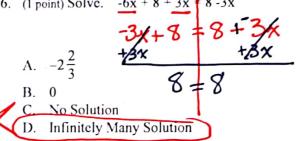




5. (1 point) What are the solutions?



6. (1 point) Solve. -6x + 8 + 3x + 8 - 3x



7. (1 point) What would you do first to solve this equation?

$$\begin{array}{c|c}
-7 & 8 - \frac{2}{3}x \\
\hline
A. \text{ subtract } 8
\end{array}$$

- B. multiply by  $-\frac{3}{2}$
- C. add 7
- D. add 8

## Write and solve an equation.



8. (1 point) Jessie is saving money to buy a new phone that costs \$98. The plans to save \$7 per week. How many weeks w will it take her to save \$98?

A. 
$$\frac{w}{7} = 98$$
; 14 weeks

C. 
$$7w = 98$$
; 14 weeks

B. 
$$w - 98 = 7$$
; 105 weeks

D. 
$$7 + w = 98$$
; 91 weeks

$$7+7+7+... = 98$$
 $7\omega = 98$ 

## Show all work!!!

One Solution Infinitely Many Solutions (I.M.S.)

No Solution

$$x = 3$$

$$5 = 5$$

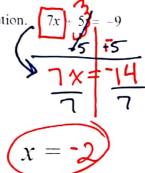
$$5 = 4$$

9. (2 points) Solve the equation.

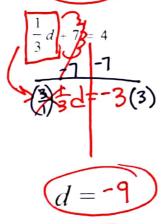


$$d = 5$$

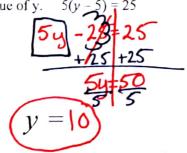
10. (2 points) Find the solution.



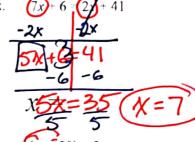
11. (2 points) Solve.



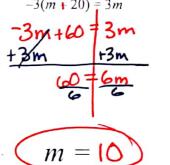
12. (3 points) Find the value of y.



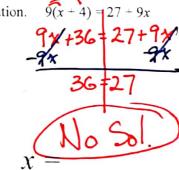
13. (3 points) Solve for x.



14. (3 points) Solve.

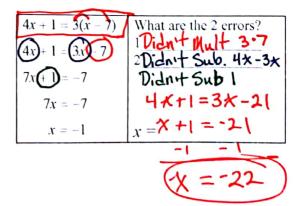


15. (3 points) Find the solution.



16. (3 points) Ariel solved the following problem.

Explain her 2 errors and correct them.



17. (4 points) Six Banners Amusement Park has a new pricing plan. It only costs \$15 to get into the park but they charge \$4 for every ride. If you have \$63 to spend bow many rides can you go on?

a.Define your variable. Time  $\pm$  Kepeat = Total a.Define your variable. Toint) b. Write an equation. (1 point) c. Solve the equation. (2 points)  $\chi = \text{Tides}$  = Total = Total

rides  $^{515} + ^{5}4x = ^{3}63$  4x = 48-15 -15 4 = 12 rides

18. (5 points) in July Andrea is going to live with her grandparents in Florida for a month and wants to join a gym while she is there. Gym A charges \$5 per day to use the facility. Gym B charges a membership fee of \$90 and only \$1.25 per day to use it. After how many days will the gyms be the same cost?

a.Define your variable. (I point)

b. Write an equation. (1 point) 0pt1 0pt2 3.75x = 90 3.75x = 90

**d.** Andrea plans to go to the gym every day while in Florida visiting her grandparents. Which gym she should join **and why (show the cost of each option)**? (1 point)

A B Andrea should 5(31) 40+1.25(31) go to Gymb go + 38.75 go + 38.75