

NAME:

Period:

Score:

/

=

% =

## HW 1-7

Int 2

Multi-Step Equations &amp; Inequalities - COMBO DAY

Unit 1

Solve. Give the exact value of the variable (Leave as a fraction in simplest form or as a whole number. NO DECIMALS) Graph the solution set for inequalities.

1.  $-9z = 21 - 3z$

$$z = -\frac{7}{2} \text{ or } -3\frac{1}{2}$$

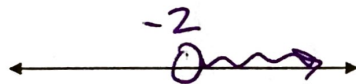
6.  $8 + 44g - 28 = 54$

2.  $21 - 13 + 10r = 12r + 9r - 2$

7.  $\frac{8n - (-2)}{-6} = 9$

$$n = -7$$

3.  $-14c - 7 > -c + 19$



$$c > -2$$

8.  $23d - 12 = 51d + 20$

4.  $-5(3 - 6x) = 21 - 3(4x - 2)$

9.  $4k - 23 = -5(7k - 11)$

$$k = 2$$

5.  $18k - k + 9 = 7k - 5 + 14$

$$k = 0$$

Determine whether the solution given for the equation is correct. If the given solution is not correct, solve to find the correct solution.

10. Solution:  $p = -9$   
Equation:  $8p = 45 + 13p$

11. Solution:  $a = \frac{17}{3}$   
Equation:  $26 - 6a = -42 + 18a$

12. Solution:  $n = 13$   
Equation:  $17n - 90 = 62n$

NO.

$$a = \frac{17}{6} \text{ or } 2\frac{5}{6}$$

Solve. Give the exact value of the variable (Leave as a fraction in simplest form or as a whole number. NO DECIMALS.)

13.  $-54 + 9h = 21 - 5h$

$$h = \frac{75}{14} \text{ or } 5\frac{5}{14}$$

17.  $-10 - k = -14 + 2k$

$$k = \frac{4}{3} \text{ or } 1\frac{1}{3}$$

14.  $3(13x + 12) - 60 = 39x + 106$

18.  $3y - 7 = 17 + 7y$

15.  $25 - 8y = -85 + 2y$

$$y = 11$$

19.  $-6z = 14 - z$

$$z = -\frac{14}{5} \text{ or } -2\frac{4}{5}$$

16.  $18 + 2x = 6x + 2$

20.  $12 - 6 + 7r = 2r + 5r - 36$

$$21. -5c - 7 < -3c - 37$$

$$c > 15$$

$$23. -4(2-3x) = 7-2(x-3)$$

$$x = \frac{3}{2} \text{ or } \frac{1}{2}$$

$$22. \frac{7n + (-5)}{-3} \leq 11$$

$$24. 8k - 2k + 3 = 6k - 3 + 6$$