

Two-Step and Variables on Both Sides HW

Date _____ Period _____

Solve each equation.

1) $\frac{x}{4} - 8 = -10$

2) $2(2 + x) = -30$

3) $-3a + 1 = -2$

4) $180 = -10(a - 4)$

5) $-5 = 5(x + 4)$

6) $-6(x + 9) = 36$

7) $\frac{1 + b}{2} = -5$

8) $14 = \frac{b}{2} + 7$

9) $-2(n - 6) = -8$

10) $3 + \frac{x}{3} = 1$

11) $5m + 2m = 5m + 12$

12) $6 - 5x = 8x + 6$

13) $6v + 8 + 7 = 5 + v + 7v$

14) $8n - 7 = -4 + 8n - 3$

15) $-5a - 5a = -16 - 2a$

16) $8m - 1 = 3 + 8m$

17) $-11 - 6x = x + 1 - 4x$

18) $7 + 3a = 1 + 3a$

19) $-5x + 8 = 8 - 5x$

20) $-6(r - 1) = 8 - 4r$

21) $-4n + 35 = -5n - 8(n - 1)$

22) $-32 + 2m = 8(-4 - 8m)$

23) $4 - 3x = -8 - 3(x - 4)$

24) $36 - 6n = -(n - 6)$

25) $-7(1 + x) = -7x - 4$

26) $4(4m - 6) = 30 - 2m$

27) $22 + 8p = -6(-4p - 1)$

28) $6x + 18 = 8(x + 1)$

29) $-8x - 30 = 2(1 - 6x)$

30) $-(4r + 1) = 5(-2r + 7)$

Variable on Both Sides Word Problems HW:

1. Twelve less than the quotient of a number and 7 is -2. Find the number.

2. The product of a number and 9, increased by 4, is 58. Find the number.

3. Nine more than four times a number is the same as one less than twice the number. Find the number.

4. Eighty, decreased by three times a number, is the same as five times the number, increased by eight. Find the number.

5. Eight less than 7 times a number is the same as 4 more than 3 times the number. Find the number.

6. Four more than 6 times a number is the same as 9 times the number increased by 10. Find the number.

7. Twenty-eight decreased by 6 times a number is the same as the number. Find the number.

8. Two more than a number is the same as 16 decreased by 6 times the number. Find the number.