Name_____

Multi-Step Equations

Date_____ Period____

Solve each equation.

1) $6a + 5a = -11$

$\{-1\}$

2) $-6n - 2n = 16$

$\{-2\}$

3) $4x + 6 + 3 = 17$

$\{2\}$

4) $0 = -5n - 2n$

$\{0\}$

5) $6r - 1 + 6r = 11$

$\{1\}$

6) $r + 11 + 8r = 29$

$\{2\}$

7) $-10 = -14v + 14v$

No solution.

8) $-10p + 9p = 12$

$\{-12\}$

9) $42 = 8m + 13m$

$\{2\}$

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

$\{-3\}$

11) $18 = 3(3x - 6)$

$\{4\}$

12) $30 = -5(6n + 6)$

$\{-2\}$

13) $-15 = -4m + 5$

$\{5\}$

14) $10 - 6v = -104$

$\{19\}$

15) $8n + 7 = 31$

$\{3\}$

16) $-9x - 13 = -103$

$\{10\}$

17) $\dfrac{n+5}{-16} = -1$

$\{11\}$

18) $-10 = -10 + 7m$

$\{0\}$

19) $-10 = 10(k - 9)$

$\{8\}$

20) $\dfrac{m}{9} - 1 = -2$

$\{-9\}$

21) $9 + 9n = 9$

$\{0\}$

22) $7(9 + k) = 84$

$\{3\}$

23) $8 + \dfrac{b}{-4} = 5$

$\{12\}$

24) $-243 = -9(10 + x)$

$\{17\}$

Name_____

Two-Step Equations

Date_____ Period____

Solve each equation.

1) $6 = \dfrac{a}{4} + 2$

{16}

2) $-6 + \dfrac{x}{4} = -5$

{4}

3) $9x - 7 = -7$

{0}

4) $0 = 4 + \dfrac{n}{5}$

{−20}

5) $-4 = \dfrac{r}{20} - 5$

{20}

6) $-1 = \dfrac{5 + x}{6}$

{−11}

7) $\dfrac{v + 9}{3} = 8$

{15}

8) $2(n + 5) = -2$

{−6}

9) $-9x + 1 = -80$

{9}

10) $-6 = \dfrac{n}{2} - 10$

{8}

11) $-2 = 2 + \dfrac{v}{4}$

{−16}

12) $144 = -12(x + 5)$

{−17}

13) $37 = -3 + 5(x + 6)$

    $\{2\}$

14) $-13 = 5(1 + 4m) - 2m$

    $\{-1\}$

15) $4(-x + 4) = 12$

    $\{1\}$

16) $-2 = -(n - 8)$

    $\{10\}$

17) $-6(1 - 5v) = 54$

    $\{2\}$

18) $8 = 8v - 4(v + 8)$

    $\{10\}$

19) $10(1 + 3b) = -20$

    $\{-1\}$

20) $-5n - 8(1 + 7n) = -8$

    $\{0\}$

21) $8(4k - 4) = -5k - 32$

    $\{0\}$

22) $-8(-8x - 6) = -6x - 22$

    $\{-1\}$

23) $8(1 + 5x) + 5 = 13 + 5x$

    $\{0\}$

24) $-11 - 5a = 6(5a + 4)$

    $\{-1\}$

Name_____

Two-Step Equation Word Problems

Date_____ Period____

1) 331 students went on a field trip. Six buses were filled and 7 students traveled in cars. How many students were in each bus?

54

2) Aliyah had $24 to spend on seven pencils. After buying them she had $10. How much did each pencil cost?

$2

3) The sum of three consecutive numbers is 72. What are the smallest of these numbers?

23

4) The sum of three consecutive even numbers is 48. What are the smallest of these numbers?

14

5) You bought a magazine for $5 and four erasers. You spent a total of $25. How much did each eraser cost?

$5

6) Maria bought seven boxes. A week later half of all her boxes were destroyed in a fire. There are now only 22 boxes left. With how many did she start?

37

7) Sumalee won 40 super bouncy balls playing horseshoes at her school's game night. Later, she gave two to each of her friends. She only has 8 remaining. How many friends does she have?

16

8) Imani spent half of her weekly allowance playing mini-golf. To earn more money her parents let her wash the car for $4. What is her weekly allowance if she ended with $12?

$16