

## Curriculum Outcomes:

**PR1:** . Generalize a pattern arising from a problem-solving context using linear equations and verify by substitution.

**PR3.** Model and solve problems using linear equations of the form:

$$ax = b; = b, a \neq 0; ax + b = c; +b = c, a \neq 0; = b, x \neq 0$$

$ax + b = cx + d; a(bx + c) = d(ex + f); a(x + b) = c; ax = b + cx$  concretely, pictorially and symbolically, where  $a, b, c, d, e,$  and  $f$  are rational numbers

Student Friendly:

“Rearranging an equation with variables on both side of the equal sign”

**Class/Homework****Worksheet 1:**

Math 9B

Name \_\_\_\_\_

6.1 &amp; 6.2 Review

Date \_\_\_\_\_

**Solve each equation.**

1)  $-5 = v - 2$        $v = -3$

2)  $-6 + x = 7$        $x = 13$

3)  $18n = 270$        $n = 15$

4)  $3 = 18 + n$        $n = -15$

5)  $3b = -\frac{27}{5}$        $b = -\frac{9}{5}$

6)  $-1 = \frac{n}{2}$        $n = -2$

7)  $\frac{1}{2} + n = \frac{5}{6}$

$$n = \frac{1}{3}$$

8)  $x + \frac{7}{5} = \frac{86}{15}$

$$n = \frac{13}{3}$$

9)  $3 = \frac{a}{8} + 5$

$$a = -16$$

10)  $81 = 5n + 6$

$$n = 15$$

13)  $4n - 3 = 13 - 2n + 4n$

$$n = 8$$

14)  $1 + 2p = 7 + p$

$$p = 6$$

# Class/Homework Worksheet 2:

Math 9

Name \_\_\_\_\_

Section 6.2: Solving Equations

Date \_\_\_\_\_

Solve each equation.

1)  $x - 6 + 7 = 3x - 11$

$x = 6$

2)  $6 + 5n + 2n = 11 + 6n$

$n = 5$

3)  $-7n + 2 = -12 + 4n - 6 - 2$

$n = 2$

4)  $9 - 2n = n - 6$

$n = 5$

$$5) -9 + x + 3 - 2 = 1 + 4x \quad \boxed{x = -3}$$

$$6) 4v + 1 = 5v - 6 + 8v - 11 \quad \boxed{v = 2}$$

$$7) 34 - 5x = 4(x - 5) \quad \boxed{x = 6}$$

$$8) 6(1 - 3n) = -27 - 7n \quad \boxed{n = 3}$$

$$9) -5(p-1) = 8 - 4p \quad \boxed{p = -3}$$

$$10) -40 + 4x = -8(-4 + 4x) \quad \boxed{x = 2}$$

$$11) -13 - 7r = -6(-5r - 4) \quad \boxed{r = -1}$$

$$12) -20 - m = 2(2 + m) \quad \boxed{m = -8}$$

$$13) -\frac{21}{5} - \frac{16}{5}b = \frac{1}{2}b - \frac{1}{2} \quad \boxed{b = 1}$$

$$14) -\frac{49}{6} + \frac{9}{4}v = \frac{9}{4}v - \frac{7}{2} \quad \boxed{v = \frac{7}{3}}$$

$$15) \frac{3}{5}v - \frac{10}{3} = \frac{1}{15} - \frac{6}{5}v + \frac{7}{2}v$$

$$v = -2$$

$$16) -x + x = 2x$$

$$x = 0$$

$$17) 2m - \frac{6}{5}m = -\frac{5}{3}m$$

$$m = 0$$

$$18) \frac{25}{36} - \frac{23}{6}v = -5v + \frac{9}{4}$$

$$v = \frac{4}{3}$$