HW 1-1 pg. 94: 11-21 odd, 25, 36, 37, 54

36, 37, 15, 54b

15. $\frac{y}{5} - 6 = 8$

$+6 \quad +6$

$5 \cdot \frac{y}{5} = 14 \cdot 5$

$\boxed{y = 70}$

36. $\frac{-5}{2} = \frac{3}{4}z + \frac{1}{2}$

$-\frac{1}{2} \qquad -\frac{1}{2}$

$\frac{-5}{2} - \frac{1}{2} = \frac{3}{4}z$

$\frac{-6}{2} = \frac{3}{4}z$

$\frac{4}{3} \cdot \frac{-3}{1} = \frac{3}{4}z \cdot \frac{4}{3}$

$\frac{-12}{3} = z$

$\frac{-4}{1}$

$\boxed{-4 = z}$

54b. $\frac{1}{a}x - 4 = 9$

$+4 \quad +4$

$a \cdot \frac{1}{a}x = 13 \cdot a$

$\boxed{x = 13a}$

1-2 – Solving Multi-step Equations

Objectives:

-I can solve an equation doing 2 or more steps

-I can distribute and combine like terms

Vocabulary: distribute, like terms, combine, isolate

Combining like terms:

$4x^2$ x^3
$-2x^3$ x^2
exp

xy
$-2xy$
$-4xy$

K
$-5k8k$

neg
$-7-9$

pos
6 3

Combining like terms:

✓ ① variable
② exponent

V. E. ✓
$4x^2$ x^2
X·X

V. E. ✓
X·X·X
$-2x^3$ x^3

xy
$-2xy$
$-4xy$

constants
$\frac{1}{2}$ -7 -9 6 3

$-5k$ $8k$
K

$3a-5a=-2a$
$2a-a=a$
$2-1=1$

$5a + 6 - a + 7 - 2$

$5a - a + 6 + 7 - 2$

$4a + 11$

$-11k + 2k - 7 + 5k - 2$

$-11k + 2k + 5k = -4k$

$-7 - 2 = -9$

$-4k - 9$

Distributing: $2(3) = 6$ multiply!

$2(x - 3) = 2(x) + 2(-3)$

$2x - 6$

$4(-y + 3)$

$-4y + 12$

$3(2x - 4y)$

$6x - 12y$

P.E.M.D.A.S.

$8(n+3) = 2 + 54$

$8n + 24 = 56$

$-24 \quad -24$

$\frac{8n}{8} = \frac{32}{8}$

$n = 4$

$7 = -2(y - 4) + 6$

$7 = -2y + 8 + 6$

$7 = -2y + 14$

$-14 \quad -14$

$\frac{-7}{-2} = \frac{-2y}{-2}$

$\frac{7}{2} = y$

$3(-4 + x) + 1 = 1$

$-12 + 3x + 1 = 1$

$-11 + 3x = 1$

$+11 \quad +11$

$\frac{3x}{3} = \frac{12}{3}$

$x = 4$

$4(m - 2n) = 8$ for m

$4m - 8n = 8$

$+8n \quad +8n$

$\frac{4m}{4} = \frac{8}{4} + \frac{8n}{4}$

$m = 2 + 2n$

$4(x-2) + 2(x+1) = 3$

$4x - 8 + 2x + 2 = 3$

$6x - 6 = 3$

$+6 \quad +6$

$6x = 9$

$\div 6 \quad \div 6$

$x = \frac{9}{6}^{3}$

$x = \frac{3}{2}$

$-2(a-b) + a - 4b = 7$ for b

Write an equation that equals -6

The formula for the area of a triangle is $A = \frac{1}{2}bh$

where A represents area, b represents the length of the base and h represents the height of the triangle.

a. Solve the formula for height, h

$\frac{2}{1} \cdot A = \frac{1}{2} \cdot bh$

$\frac{2A}{b} = \frac{bh}{b}$

$\frac{2A}{b} = h$

b. Find the height of a triangle that has a base of 3cm and an area of $12cm^2$

$\frac{2 \cdot 12}{3} = h$

$\frac{24}{3} = h$

$8cm = h$

HW 1-2' pg 100 3, 4, 15, 49, 52, 53, 56, 57, 59

3. $6(n+4) = -18$

4. $7 = -11 + 3(b+5)$

15. $\frac{5v-4}{10} = \frac{4}{5}$

16. $8 = 4(r+4)$

17. $6(n+5) = 66$