Name: _____ Date: _____

Period ___ Henderson – Math 8

Homework for Week 3

Monday: HW# 3A (go to www.khanacademy.org or www.hendersonmath.com for review)

Solve each equation. Show all properties of equality used.

1.) $4r + 6 = 10r$

$-4r \quad -4r$

$\frac{6}{6} = \frac{6r}{6}$

$1 = r$

2.) $2x - 5 = -17$

$+5 \quad +5$

$\frac{2x}{2} = \frac{-12}{2}$

$x = -6$

3.) $\frac{x}{4} + 5 = 9$

$-5 \quad -5$

$(4)\frac{x}{4} = 4(4)$

$x = 16$

4.) $-2(2w - 4) = 30$

$-4w + 8 = 30$

$-8 \quad -8$

$\frac{-4w}{-4} = \frac{22}{-4}$

$w = -5.5$

5.) $\frac{1}{3}(6x - 12) = 16$

$2x - 4 = 16$

$+4 \quad +4$

$\frac{2x}{2} = \frac{20}{2}$

$x = 10$

Tuesday: HW #3B

6.) $\frac{1}{2}(4x - 12) = 24$

$2x - 6 = 24$

$+6 \quad +6$

$\frac{2x}{2} = \frac{30}{2}$

$x = 15$

7.) $2 - \frac{w}{3} = 6$

$-2 \quad -2$

$(-3)\frac{-w}{3} = 4(-3)$

$w = -12$

8.) $-\frac{2}{3}x - 6 = 14$

Multiply by reciprocal

$+6 \quad +6$

$(-\frac{3}{2})-\frac{2}{3}x = 20(-\frac{3}{2})$

$x = -30$

9.) $\frac{a-5}{3} = 7$

$(3)\frac{a-5}{3} = 7(3)$

$a - 5 = 21$

$+5 \quad +5$

$a = 26$

10.) $8 - \frac{2}{7}w = -2$

$-8 \quad -8$

$(\frac{7}{-2})-\frac{2}{7}w = -10(\frac{7}{-2})$

$w = 35$

11.) $9 = \frac{h}{5} + 1$

$-1 \quad -1$

$(5)8 = \frac{h}{5}(5)$

$40 = h$

Wednesday: HW# 3C

Solve.

12.) $6x = 2x - 8$

$-2x \quad -2x$

$\frac{4x}{4} = \frac{-8}{4}$

$x = -2$

13.) $7 - 5x = 4x + 9$

$+5x \quad +5x$

$\frac{7}{9} = \frac{9x+9}{9}$

$\frac{-2}{9} = \frac{9x}{9}$

$-\frac{2}{9}$ 0.222

14.) $2x + 9 = 20x$

$-2x \quad -2x$

$\frac{9}{18} = \frac{18x}{18}$

$x = 0.5$

15.) $2 + \frac{2}{3}f = -7$

$-2 \quad -2$

$\frac{3}{2}\left(\frac{2}{3}f\right) = -9\left(\frac{3}{2}\right)$

$f = \frac{-27}{2}$ -13.5

16.) $10r + 5 = 26 + 7r$

$-7r \quad -7r$

$3r + 5 = 26$

$-5 \quad -5$

$\frac{3r}{3} = \frac{21}{3}$

$r = 7$

17.) $\frac{x}{4} - 9 = -2$

$+9 \quad +9$

$(4)\frac{x}{4} = 7(4)$

$x = 28$

18.) $8x - 2x + 12 = 20x - 6$

$6x + 12 = 20x - 6$

$-6x \quad -6x$

$\frac{12}{+6} = \frac{14x - 6}{+6}$

$\frac{18}{14} = \frac{14x}{14}$

$1\frac{4}{14} = x$ $x = 1\frac{2}{7}$

19.) $-6x + 4 = 8x - 16 + 2x$

$-6x + 4 = 10x - 16$

$+6x \quad +6x$

$\frac{4}{-16} = \frac{16x - 16}{+16}$

$\frac{-12}{16} = \frac{16x}{16}$

$-\frac{3}{4} = x$

Thursday: HW #3D

20.) Time yourself.... (try and finish in less than a minute ;-)

5 x 4 20	7 x 9 63	8 x 5 40	6 x 6 36	11 x 12 132
8 x 7 56	6 x 12 72	4 x 6 24	12 x 8 96	9 x 7 63
11 x 3 33	7 x 2 14	11 x 8 88	2 x 5 10	4 x 12 48
9 x 6 54	9 x 8 72	4 x 9 36	8 x 7 56	3 x 8 24
4 x 9 36	11 x 11 121	9 x 9 81	3 x 3 9	11 x 12 132
6 x 6 36	7 x 8 56	3 x 11 33	12 x 8 96	3 x 9 27
3 x 3 9	9 x 9 81	5 x 12 60	5 x 6 30	8 x 11 88
10 x 6 60	3 x 7 21	5 x 8 40	12 x 12 144	9 x 6 54
11 x 4 44	3 x 12 36	12 x 4 48	8 x 7 56	5 x 3 15