

Name: \_\_\_\_\_  
Period \_\_\_\_\_

Date: \_\_\_\_\_  
Henderson - Math 8

Homework for Week 2

**Monday: HW# 2A** (go to [www.khanacademy.org](http://www.khanacademy.org) or [www.hendersonmath.com](http://www.hendersonmath.com) for review)

Solve each equation. Show all properties of equality used.

1.)  $4(r + 2) = 8$

$$\begin{array}{r} 4r + 8 = 8 \\ -8 \quad -8 \\ \hline 4r = 0 \\ \frac{4}{4} \quad \frac{0}{4} \\ \hline r = 0 \end{array}$$

2.)  $2(a + 3) = -18$

$$\begin{array}{r} 2a + 6 = -18 \\ -6 \quad -6 \\ \hline 2a = -24 \\ \frac{2}{2} \quad \frac{-24}{2} \\ \hline a = -12 \end{array}$$

3.)  $\frac{x}{5} + 3 = 10$

$$\begin{array}{r} \frac{x}{5} + 3 = 10 \\ -3 \quad -3 \\ \hline \frac{x}{5} = 7 \\ \times 5 \quad \times 5 \\ \hline x = 35 \end{array}$$

4.)  $-6(2w + 4) - 4 = 30$

$$\begin{array}{r} -12w - 24 - 4 = 30 \\ -12w - 28 = 30 \\ +28 \quad +28 \\ \hline -12w = 58 \\ \frac{-12w}{-12} = \frac{58}{-12} \\ \hline w = -4.8\bar{3} \end{array}$$

5.)  $\frac{1}{2}(4x - 12) = 16$

$$\begin{array}{r} 2x - 6 = 16 \\ +6 \quad +6 \\ \hline 2x = 22 \\ \frac{2x}{2} = \frac{22}{2} \\ \hline x = 11 \end{array}$$

**Tuesday: HW #2B**

6.)  $\frac{1}{2}(6x - 10) = 22$

$$\begin{array}{r} 3x - 5 = 22 \\ +5 \quad +5 \\ \hline 3x = 27 \\ \frac{3x}{3} = \frac{27}{3} \\ \hline x = 9 \end{array}$$

7.)  $15 - \frac{w}{4} = 28$

$$\begin{array}{r} -15 - 15 \\ \hline -\frac{w}{4} = 13 \\ (-4) \quad (-4) \\ \hline w = -52 \end{array}$$

8.)  $-\frac{1}{2}x - 7 = -11$

$$\begin{array}{r} x = 11 \\ +7 \quad +7 \\ \hline -\frac{1}{2}x = -4 \\ \times 2 \quad \times 2 \\ \hline x = 8 \end{array}$$

9.)  $\frac{a-4}{5} = 12$

$$\begin{array}{r} a - 4 = 60 \\ +4 \quad +4 \\ \hline a = 64 \end{array}$$

10.)  $12 - \frac{3}{5}w = -27$

$$\begin{array}{r} -12 \quad -12 \\ \hline -\frac{3}{5}w = -39 \\ (-\frac{5}{3}) \quad (-\frac{5}{3}) \\ \hline w = 65 \end{array}$$

11.)  $13 = \frac{h}{3} + 4$

$$\begin{array}{r} -4 \quad -4 \\ \hline 9 = \frac{h}{3} \\ \times 3 \quad \times 3 \\ \hline h = 27 \end{array}$$

**Wednesday: HW# 2C**

Solve.

12.)  $-3x + 2 + 5x = 26$

$$\begin{array}{r} 2x + 2 = 26 \\ -2 \quad -2 \\ \hline 2x = 24 \end{array} \quad x = 12$$

15.)  $5 + \frac{2}{3}f = -5$

$$\begin{array}{r} \left(\frac{3}{2}\right) \frac{2}{3}f = -10 \left(\frac{3}{2}\right) \\ f = -15 \end{array}$$

18.)  $8 - 2x = 20$

$$\begin{array}{r} -8 \quad -8 \\ -2x = 12 \\ -2 \quad -2 \\ \hline x = -6 \end{array}$$

13.)  $7 - \frac{x}{2} = -14$

$$\begin{array}{r} -7 \quad -7 \\ (-2) \frac{-x}{2} = -21 (-2) \\ x = +42 \end{array}$$

16.)  $13 = 10 + 6r$

$$\begin{array}{r} -10 \quad -10 \\ 3 = 6r \\ \frac{3}{6} = \frac{6r}{6} \\ 0.5 = r \end{array} \quad \left(\frac{1}{2}\right)$$

19.)  $-5x + 4 = -16$

$$\begin{array}{r} -4 \quad -4 \\ -5x = -20 \\ -5 \quad -5 \\ \hline x = +4 \end{array}$$

14.)  $2x + 8 = 20$

$$\begin{array}{r} -8 \quad -8 \\ 2x = 12 \\ 2 \quad 2 \\ \hline x = 6 \end{array}$$

17.)  $\frac{x}{4} - 5 = -8$

$$\begin{array}{r} 4 \quad 4 \\ \frac{x}{4} = -3 \\ (4) \frac{x}{4} = -3 (4) \\ x = -12 \end{array}$$

20.)  $\frac{x}{5} + 6 = -2$

$$\begin{array}{r} -6 \quad -6 \\ \frac{x}{5} = -8 \\ (5) \frac{x}{5} = -8 (5) \\ x = -40 \end{array}$$

**Thursday: HW #2D**

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

8 x 4	<u>32</u>	7 x 12	<u>84</u>	8 x 9	<u>72</u>	6 x 5	<u>30</u>	10 x 12	<u>120</u>
7 x 7	<u>49</u>	2 x 11	<u>22</u>	4 x 9	<u>36</u>	12 x 4	<u>48</u>	9 x 9	<u>81</u>
12 x 3	<u>36</u>	5 x 2	<u>10</u>	11 x 6	<u>66</u>	4 x 5	<u>20</u>	4 x 10	<u>40</u>
6 x 6	<u>36</u>	6 x 8	<u>48</u>	4 x 1	<u>4</u>	8 x 3	<u>24</u>	5 x 8	<u>40</u>
7 x 9	<u>63</u>	11 x 10	<u>110</u>	6 x 7	<u>42</u>	4 x 4	<u>16</u>	12 x 12	<u>144</u>
8 x 8	<u>64</u>	7 x 4	<u>28</u>	2 x 6	<u>12</u>	11 x 8	<u>88</u>	3 x 3	<u>9</u>
4 x 3	<u>12</u>	4 x 9	<u>36</u>	6 x 12	<u>72</u>	5 x 5	<u>25</u>	3 x 11	<u>33</u>
11 x 6	<u>66</u>	3 x 2	<u>6</u>	7 x 8	<u>56</u>	8 x 12	<u>96</u>	9 x 2	<u>18</u>
12 x 9	<u>108</u>	3 x 10	<u>30</u>	11 x 4	<u>44</u>	2 x 7	<u>14</u>	8 x 3	<u>24</u>