

Warm up:

Solve.

$$1) \begin{array}{r} 2.7 - 1.8n = 12.24 \\ -2.7 \quad -2.70 \\ \hline -1.8n = 9.54 \\ \hline -1.8 \quad -1.8 \\ \hline \end{array}$$

$$n = -5.3$$

$$\begin{array}{r} 5.3 \\ 18 \overline{) 95.4} \\ \underline{-90} \\ 54 \\ \underline{-54} \\ 0 \end{array}$$

$$\begin{array}{r} 7.2 \\ +7.9 \\ \hline 15.1 \end{array}$$

$$2) \begin{array}{r} -7.2 = -a + 7.9 \\ -7.9 \quad -7.9 \\ \hline -15.1 = -a \\ \hline -1 \quad -1 \\ \hline 15.1 = a \end{array}$$

$$\begin{array}{r} -7.2 - 7.9 \\ -7.2 + (-7.9) \\ -15.1 \end{array}$$

HW Solutions

1) $a = -6$

2) $n = -5 \frac{13}{15}$

3) $h = 7 \frac{1}{2}$

4) $b = -3 \frac{19}{21}$

5) $c = 4 \frac{7}{8}$

6) $g = 2 \frac{2}{9}$

$$\textcircled{3} \quad -2\frac{1}{4} = 4 - \frac{5}{6}h$$

$$-\frac{3}{1} \cdot \frac{1}{4} \left(-\frac{5}{2} \right) = \left(-\frac{5}{6}h \right) \left(-\frac{6}{3} \right)$$

$$\frac{15}{2} = h$$

$$7\frac{1}{2} = h$$

$$\begin{aligned} & -2\frac{1}{4} - 4 \\ & -\frac{9}{4} - \frac{4}{1} \\ & -\frac{9}{4} - \frac{16}{4} \\ & -\frac{9-16}{4} \\ & -\frac{-9}{4} \\ & -\frac{9}{4} \\ & -2\frac{1}{4} \end{aligned}$$

②

$$-3 = -\frac{4}{5} + \frac{3}{5} n$$

$$\frac{8}{5} \left(-\frac{1}{5} \right) = \left(\frac{3}{5} n \right) \frac{8}{5}$$

$$-\frac{8}{5} = n$$

$$-5\frac{1}{5} = n$$

$$-\frac{3}{1} + \frac{4}{5}$$

$$-\frac{15}{5} + \frac{4}{5}$$

$$-\frac{11}{5}$$

④

$$-3\frac{1}{2} - \frac{3}{4}b = -\frac{4}{7} + 3\frac{1}{2}$$

$$-\frac{4}{3} \left(-\frac{3}{4}b \right) = \left(\frac{41}{14} \right) \left(-\frac{4}{3} \right)$$

$$b = -\frac{82}{21}$$

$$b = -3\frac{19}{21}$$

$$-\frac{4}{7} + 3\frac{1}{2}$$

$$-\frac{4}{7} + \frac{7}{2}$$

$$-\frac{8}{14} + \frac{49}{14}$$

$$-8 + 49$$

$$\frac{41}{14}$$

$$\textcircled{1} \quad \frac{4}{9} = 2\frac{2}{3} - 9$$

$$\begin{array}{r} -2\frac{2}{3} \quad -2\frac{2}{3} \\ \hline -\frac{20}{9} = -9 \\ \hline -1 \quad -1 \\ \hline \frac{20}{9} = 9 \\ \hline \end{array}$$

$$\textcircled{2\frac{2}{3} = 9}$$

$$\begin{array}{r} \frac{4}{9} - 2\frac{2}{3} \\ \frac{4}{9} - \frac{8}{3} \\ \frac{4}{9} - \frac{24}{9} \\ 4 - 24 \\ 4 + (-24) \\ -20 \\ -\frac{20}{9} \div -1 \\ -\frac{20}{9} \div \left(-\frac{1}{1}\right) \\ -\frac{20}{9} \cdot \left(-\frac{1}{1}\right) \end{array}$$

Practice

1) $\frac{2}{9}x - 3 = -\frac{4}{5}$	4) $1\frac{3}{5} = 2\frac{1}{6} + 2\frac{1}{2}n$
2) $-4\frac{1}{8} = \frac{2}{3} - 2a$	5) $-3\frac{2}{3}w - 5\frac{1}{2} = -4\frac{3}{8}$
3) $-\frac{3}{7} + \frac{3}{4}y = \frac{1}{2}$	6) $6 - 9\frac{2}{5}p = -\frac{1}{3}$

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

$$+3 \quad +3$$

$$\frac{9}{2} \left(\frac{2}{9}x \right) = \left(\frac{11}{5} \right) \frac{9}{2}$$

$$x = \frac{99}{10}$$

$$x = 9\frac{9}{10}$$

$$-\frac{4}{5} + \frac{3}{1} - \frac{3}{5}$$

$$-\frac{4}{5} + \frac{6}{5} - \frac{3}{5}$$

$$-\frac{1}{5}$$

$$\frac{2}{9}x = \frac{11}{5}$$

$$\frac{2}{9}x \cdot \frac{9}{2} = \frac{11}{5} \cdot \frac{9}{2}$$

$$\frac{11}{5} \div \frac{9}{2}$$

$$\frac{11}{5} \cdot \frac{2}{9}$$

$$2) \quad -4\frac{1}{8} = \frac{2}{3} - 2a$$

$$- \frac{2}{3} - \frac{2}{3}$$

$$- \frac{115}{24} = -2a$$

$$\frac{-2}{-2} \quad \frac{-2}{-2}$$

$$\frac{115}{48} = a$$

$$2\frac{19}{48} = a$$

$$- \frac{3^2}{8} - \frac{2}{3} \quad -99-16$$

$$- \frac{99}{24} - \frac{16}{24} \quad -99+(-16)$$

$$-115$$

$$- \frac{115}{24} \cdot \left(-\frac{1}{2}\right)$$

$$3) \quad -\frac{3}{7} + \frac{3}{4}y = \frac{1}{2}$$

$$4) \quad 1\frac{3}{5} = 2\frac{1}{6} + 2\frac{1}{2}n$$

$$5) \quad -3\frac{2}{3}w - 5\frac{1}{2} = -4\frac{3}{8}$$

$$6) \quad 6 - 9\frac{2}{5}p = -\frac{1}{3}$$

January 11, 2022

