8/17 Algebra 1 - Downing

Bellwork - Go over HW

1.1 Solving simple equations

Variables → letters that represent an unknown number

1) $m - 18 = -3$ ★ Balance the equation

$+18 \quad +18$

$\boxed{m = 15}$

2) $\frac{-2n}{-2} = \frac{-38}{-2}$

$\boxed{n = 19}$

3) $\frac{4x}{6} = 15$ (6) or $\frac{\cancel{3}^{1} \cdot 2 \cdot \cancel{4}x}{\cancel{3}_{1} \cancel{6}} = \frac{15}{1}\left(\frac{3}{2}\right)$

$\frac{4x}{4} = \frac{90}{4}$ $\quad x = \frac{45}{2}$ or 22.5

$\boxed{x = 22.5}$

4) $\frac{2 \cdot}{\cancel{2}} - 8 = \frac{r-1}{\cancel{2}}$ $\cdot \cancel{2}$

$-16 = r - 1$

$+1 \quad +1$

$\boxed{-15 = r}$

5) $-7(x-8) = 196$ or $\frac{-7(x-8)}{-7} = \frac{196}{-7}$

$-7x + 56 = 196$

$-56 \quad -56$

$\frac{-7x}{-7} = \frac{140}{-7}$ → $\boxed{x = -20}$

$x - 8 = -28$

$+8 \quad +8$

$\boxed{x = -20}$

6) $37 = -3 - 8x$

$+3 \quad +3$ ← * Be sure to bring down the Negative 8

$\frac{40}{-8} = \frac{-8x}{-8}$

$-5 = x$

7) $-8 = -5 + \frac{y}{5}$

$+5 \quad +5$

$(5) - 3 = \frac{y}{5}(5)$

$-15 = y$

HW: WS 11 Solving Simple Equations

#1-8 only