8/28 Algebra 1 - Downing

Bellwork - solve for x

(1) $\frac{3}{4}x - 5 = 7$

$+5 \quad +5$

$\frac{3}{4}x = 12(4)$

$\frac{3x}{3} = \frac{48}{3}$

$\boxed{x = 16}$

(2) $5 - 3x = 26$

$-5 \quad -5$

$\frac{-3x}{-3} = \frac{21}{-3}$

$\boxed{x = -7}$

(3) $2(x-5) = 16$

$2x - 10 = 16$

$+10 \quad +10$

$\frac{2x}{2} = \frac{26}{2}$

$\boxed{x = 13}$

Go over HW - mark ones missed + turn in

1.3 - Multi-Step Equations

Ex) $-7(-7b+1) - 5 = -306$

$49b - 7 - 5 = -306$

$49b - 12 = -306$

$+12 \quad +12$

$\frac{49b}{49} = \frac{-294}{49}$

$\boxed{b = -6}$

Ex) $-5 + 3(x-7) = -25 + 3x$

$-5 + 3x - 21 = -25 + 3x$

$-26 + 3x = -25 + 3x$

$-3x \quad -3x$

$-26 \neq -25$

No Solution

Ex) $3 + 4(x-6) = -21 + 4x$

$3 + 4x - 24 = -21 + 4x$

$-21 + 4x = -21 + 4x$

$-4x \quad -4x$

$-21 = -21$

All Real Numbers

Ex) $36 - 8x = -(x-5)$

$36 - 8x = -x + 5$

$+8x \quad +8x$

$36 = 7x + 5$

$-5 \quad -5$

$\frac{31}{7} = \frac{7x}{7}$

$\boxed{\frac{31}{7} = x}$

HW - One-step and Multi-Step Equations Worksheet