Name Key Date 9.13 Period: 1 2 3 4 5 6

Topic 1 // Holt 2.1 // Practice B **2008-09**

A. Solve for x.

1. Solve for x: $3(x - 5) = 18$

$\frac{3}{3}$ $\frac{3}{3}$

$x - 5 = 6$

$+5$ $+5$

$\boxed{x = 11}$

2. Solve for x: $5x + 3 = 2x - 1$

$-2x$ -3 $-2x$ -3

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

$\boxed{x = -4/3}$

3. Solve for a: $2(4a - 5) = 3a - 5$

$8a - 10 = 3a - 5$

$-3a + 10 \quad -3a + 10$

$\frac{5a}{5} = \frac{5}{5}$

$\boxed{a = 1}$

4. Solve for x: $\frac{3}{4}x - 1 = \frac{1}{2}$

$+1$ $+1$

$\frac{1}{2} + \frac{2}{2} = \frac{3}{2}$

$\left(\frac{4}{3}\right)\frac{3}{4}x = \frac{3}{2}\left(\frac{4}{3}\right)^2$

$\boxed{x = 2}$

5. Solve for y: $2(y - 3) - (y + 10) = -7y + 8$

$2y - 6 - y - 10 = -7y + 8$

$1y - 16 = -7y + 8$

$+7y + 16 \quad +7y + 16$

$\frac{8y}{8} = \frac{24}{8}$

$\boxed{y = 3}$

6. Solve for n: $\frac{2}{3}n + 8 = 3n + 8$

-8 -8

$\frac{2}{3}n = 3n$

$-3n$ $-3n$

$-2\frac{1}{3}n = 0$ or $\left(\frac{-3}{7}\right)\frac{7}{3}n = 0\left(\frac{-3}{7}\right)$

$-2\frac{1}{3}$ $-2\frac{1}{3}$

$\boxed{n = 0}$ $\boxed{n = 0}$

B. Solve each Literal Equation for x.

7. $y - x = 7$

$-y$ $-y$

$(-1)-x = 7 - y(-1)$

$\boxed{x = -7 + y}$

8. $3x + 2y = z$

$-2y$ $-2y$

$\frac{3x}{3} = \frac{z - 2y}{3}$

$\boxed{x = \frac{z - 2y}{3}}$

9. $\frac{2}{3}x - 5 = y$

$+5$ $+5$

$\left(\frac{3}{2}\right)\frac{2}{3}x = y + 5\left(\frac{3}{2}\right)$

$\boxed{x = \frac{3}{2}(y + 5)}$ or $x = \frac{3}{2}y + \frac{15}{2}$

10. $5(x - 10) = a$

$5x - 50 = a$

$+50$ $+50$

$\frac{5x}{5} = \frac{a + 50}{5}$

$\boxed{x = \frac{a + 50}{5}}$

11. $-2(3 + x) = y$

$-6 - 2x = y$

$+6$ $+6$

$\frac{+2x}{-2} = \frac{y + 6}{-2}$

$\boxed{x = \frac{-y - 6}{2}}$ or

12. $5x + xy = 3$

$\frac{x(5 + y)}{5 + y} = \frac{3}{5 + y}$

$\boxed{x = \frac{3}{5 + y}}$