

2.3 - Solving Equations with
Variables on Both Sides

1. $6k - 3 = 2k + 13$ 2. $9t + 7 = 3t - 5$

$4k = 16$
 $k = 4$

$6t = -12$
 $t = -2$

3. $\left(\frac{2}{5}n - 9 = 7 - \frac{3}{5}n\right) 5$

$2n - 45 = 35 - 3n$
 $5n = 80$
 $n = 16$

4. $\left(8 - \frac{1}{2}p = \frac{3}{2}p - 10\right) 2$

$16 - p = 3p - 20$
 $36 = 4p$
 $9 = p$

5. $8c + 1 = 7c - 14 - 2c$

$8c + 1 = 5c - 14$

$3c = -15$

$c = -5$

6. $8 - 2(t + 1) = -3t + 1$

$8 - 2t - 2 = -3t + 1$

$6 - 2t = -3t + 1$

$t = -5$

7. $5 + 2(k + 4) = 5(k - 3) + 10$

$5 + 2k + 8 = 5k - 15 + 10$

$13 + 2k = 5k - 5$

$18 = 3k$

$6 = k$