

Solving Equations—Variables on Both Sides

$$\begin{aligned}5x + 6 &= 2x + 5 \\5x - 2x + 6 &= 2x - 2x + 15 \\3x + 6 - 6 &= 15 - 6 \\ \frac{3x}{3} &= \frac{9}{3} \\x &= 3\end{aligned}$$

1. $20y + 5 = 5y + 65$

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

2. $13 - t = t - 7$

8. $-x - 2 = 1 - 2x$

3. $-3k + 10 = k + 2$

9. $3k + 10 = 2k - 21$

4. $-9r = 20 + r$

10. $8y - 6 = 5y + 12$

5. $6m - 2\frac{1}{2} = m + 12\frac{1}{2}$

11. $-t + 10 = t + 4$

6. $18 + 4.5p = 6p + 12$

12. $4m - 9 = 5m + 7$