

# Chapter 1

## Compound Inequalities

1.  $6x - 3 \leq 9$  or  $-5x + 10 < 30$

3.  $-2a + 1 \geq 9$  or  $5a + 2 \geq -28$

5.  $-2 < 3x + 1 < 10$

7.  $14x - 9 \geq 0$  and  $12x - 13 \leq 16$

9.  $-2x - 2 < 16$  or  $-13x - 3 \leq 13$

11.  $3x - 2 \leq 8$  and  $-7x + 13 \leq 49$

13.  $7x + 2 > 8$  or  $-6x - 4 > 19$

2.  $-0.25 < 0.5x + 1.5 \leq 2.5$

4.  $12 \leq 7w - 2 < 40$

6.  $\frac{1}{2}x - \frac{1}{3} \geq -\frac{1}{6}$  or  $\frac{2}{7}x \leq \frac{1}{10}$

8.  $-4x + 2 < 1$  or  $11x - 5 \leq 43$

10.  $-6x + 2 \leq 21$  and  $-7x - 2 \geq 35$

12.  $12x + 13 > 46$  or  $-12x - 15 < 24$

14.  $2x + 9 \leq 23$  and  $4x + 14 \geq -45$

### 1.1 Compound Inequalities Key