

Section 1.7

Video 1

Solve. Present your solution set in set-builder notation, on a number line, and using interval notation.

1) $3x - 10 < 8$

2) $-2x + 7 \leq 17$

3) $9x - 11 \geq 2(x + 5)$

4) $2x - 9 > 4x + 21$

Video 2

Solve. Present your solution set in set-builder notation, on a number line, and using interval notation.

5) $-8 \leq 3x + 10 \leq 25$

6) $2x - 3 < 11$ or $3x + 5 \geq 35$

Video 3

Solve. Present your solution set in set-builder notation, on a number line, and using interval notation.

7) $x^2 - 5x - 36 < 0$

Solve. Present your solution set in set-builder notation, on a number line, and using interval notation.

8) $4x^2 + 12x - 27 \geq 0$

Solve. Present your solution set in set-builder notation, on a number line, and using interval notation.

9) $x^2 + 6x - 10 \leq 0$

Video 4

10) A projectile is fired from the roof of a building 27 feet tall with an initial velocity of 64 feet per second. For what length of time is the projectile at least 75 feet above the ground?

Video 5

Solve. Present your solution set in set-builder notation, on a number line, and using interval notation.

11) $\frac{x-9}{x+4} > 0$

Solve. Present your solution set in set-builder notation, on a number line, and using interval notation.

$$12) \frac{x^2 - 5x - 14}{x^2 - 25} \leq 0$$

Video 6

Solve. Present your solution set in set-builder notation, on a number line, and using interval notation.

13) $\frac{3}{x+5} > 2$

Solve. Present your solution set in set-builder notation, on a number line, and using interval notation.

$$14) \frac{6x+1}{2x-3} < 4$$