

Chapter 5

Self-Exercise

Solve the following inequalities. Then graph the answer and express the answer in interval notation.

1. $11y - 233 \geq 6(2 - 4y)$

Example:

$$11y - 233 \geq 12 - 24y$$

$$11y + 24y - 233 \geq 12 - 24y + 24y$$

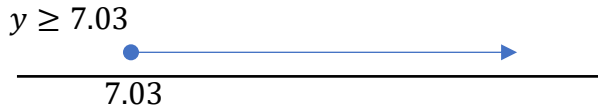
$$35y - 233 \geq 12$$

$$35y - 233 + 233 \geq 12 + 233$$

$$35y \geq 246$$

$$\frac{35}{35}y \geq \frac{246}{35}$$

$$y \geq 7.03$$



In interval notation form: $[7.03, \infty)$

2. $2q - 4 + 5q \leq -130$

3. $2(6 - 4a) \geq 9a - 56$

4. $6h + 3h > -90$

5. $2d - 11 + 5d < 94$

6. $4(6 - 5b) - 3b > 10b - 240$

7. $-48 < -3v + 5v$

8. $8k - 76 \leq 4(6 - 3k)$

9. $4z - 190 \leq 6(5 - 2z) - 4z$

10. $-24 \geq -5r - 6 + 3r$