

Review Key Vocabulary

inequality, p. 126

solution of an inequality, p. 126

solution set, p. 126

graph of an inequality, p. 127

Review Examples and Exercises



Writing and Graphing Inequalities (pp. 124–129)

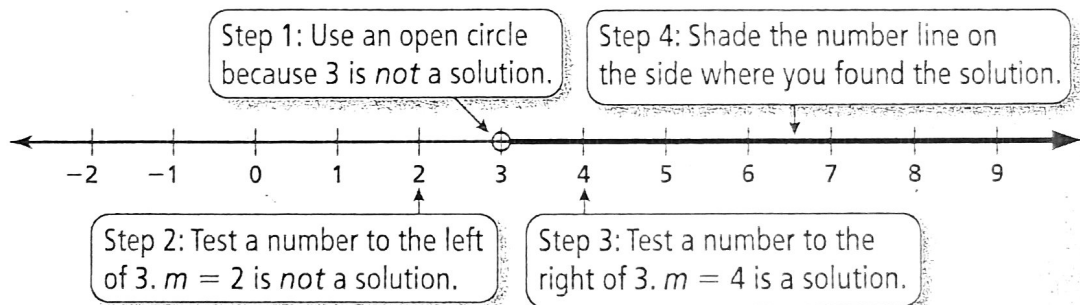
- a. Six plus a number x is at most $-\frac{1}{4}$. Write this word sentence as an inequality.

Six plus a number x is at most $-\frac{1}{4}$.

$$\underbrace{6 + x}_{\text{Six plus a number } x} \underbrace{\leq}_{\text{is at most}} \underbrace{-\frac{1}{4}}_{-\frac{1}{4}}$$

∴ An inequality is $6 + x \leq -\frac{1}{4}$.

- b. Graph $m > 3$.



Exercises

Write the word sentence as an inequality.

- A number w is greater than -3 .
- A number y minus $\frac{1}{2}$ is no more than $-\frac{3}{2}$.

Tell whether the given value is a solution of the inequality.

- $5 + j > 8; j = 7$
- $6 \div n \leq -5; n = -3$

Graph the inequality on a number line.

- $q > -1.3$
- $s < 1\frac{3}{4}$

7. **BUMPER CARS** You must be at least 42 inches tall to ride the bumper cars at an amusement park. Write an inequality that represents this situation.