

## 3.4–3.5 Quiz



Solve the inequality. Graph the solution. (Section 3.4)

1.  $2m + 1 \geq 7$

2.  $\frac{n}{6} - 8 \leq 2$

3.  $2 - \frac{j}{5} > 7$

4.  $\frac{5}{4} > -3w - \frac{7}{4}$

Write the word sentence as an inequality. Graph the inequality. (Section 3.4)

5. A number  $h$  is greater than 1 and less than 6.

6. A number  $q$  is less than or equal to  $-3$  or at least 2.

Solve the inequality. Graph the solution, if possible. (Section 3.4)

7.  $7 > -2y + 5 > -3$

8.  $3z + 2 \leq -10$  or  $z - 7 \geq -5$

9.  $|2b - 1| \leq 3$

10.  $-4|r - 1| + 7 < -9$

Graph the inequality in a coordinate plane. (Section 3.5)

11.  $y \geq -8$

12.  $x < 6$

13.  $x + y > 5$

14.  $4x - 4y \leq 8$

15. **PARTY** You buy lunch for guests at a party. You can spend no more than \$100. You will spend \$20 on beverages and \$10 per guest on sandwiches. Write and solve an inequality to find the number of guests you can invite to the party. (Section 3.4)

16. **BOOKS** You have a gift card worth \$50. You want to buy several paperback books that cost \$6 each. Write and solve an inequality to find the number of books you can buy and still have at least \$20 on the gift card. (Section 3.4)

17. **SUPPLIES** You have \$6 to spend on pens and notebooks. Pens cost \$0.75 each and notebooks cost \$1.50 each. Write and graph an inequality that represents the numbers of pens and notebooks you can buy. Identify and interpret a solution of the inequality. (Section 3.5)

