## 8.3-8.4 Quiz



Solve the inequality. Graph the solution. (Section 8.3)

1. 
$$\frac{a}{3} < 5$$

**2.** 
$$121 \ge 11s$$

**3.** 
$$12p > 24$$

Write the word sentence as an inequality. Then solve the inequality. (Section 8.3)

- **4.** Three times a number x is more than 18.
- **5.** A number d divided by 24 is at most 1.25.
- **6.** 84 is no less than 7 times a number k.

Solve the inequality. Graph the solution. (Section 8.4)

7. 
$$2n + 14 < 15$$

**8.** 
$$\frac{n}{2} + 3 > 5$$

**9.** 
$$5 \le 6k - 1$$

- **10. BAND** A band director wants to divide members of the band into 4 equal groups with no more than 9 students in each group. Write and solve an inequality to represent the total number of band members. *(Section 8.3)*
- **11. CHARITY WALK** You want to raise at least \$300 for a charity walk. So far, you have raised \$135. You ask donors to give \$15. Write and solve an inequality to find how many more \$15 donations you need. (Section 8.4)
- **12. GARDEN** You want to use a square section of your yard for a garden. You have at most 52 feet of fencing to surround the garden. Write and solve an inequality to represent the possible lengths of each side of the garden. (Section 8.3)



- **13. BOTTLED WATER** You need at least 24 bottles of water for a camping trip. You have 3 bottles left over from a previous camping trip. (Section 8.4)
  - **a.** A store sells water in packages of 8 bottles each. Write and solve an inequality to represent the number of packages you need to buy for the trip.
  - **b.** Would it be better to buy *two* or *three* packages of bottled water for the trip? Explain.