**1. Graph the inequalities on the number line given:**

a) *x* < 8 b) x ≥ 10

**2. Write out the inequality shown on the number lines below:**

a) \_\_\_\_\_\_\_\_\_\_\_\_\_ b) \_\_\_\_\_\_\_\_\_\_\_\_\_\_

**3. Solve and graph the inequalities given. Show all work for full credit:**

a) b) 26 < 23 + v



**4. Solve and graph the inequalities given. Show all work for full credit:**

a) b) -8x ≥ 48

**5. Is the given value a solution of the inequality? Show substitution work and write “yes” or “no”.**

a) x – 2 ≥ -1; x = 8 b) -2c < 9 + c; c = -20

**6. Write the word sentence as an inequality. Don’t solve.**

The **difference** of -3.6 and a number x is less than 6.5.

**7.** **Write an inequality that represents this situation. Let x represent age.**

A person who is **at least** 65 years old is often considered a senior citizen.