

## 4-4 Writing Inequalities

### Writing Inequalities from Word Problems:

1. Read phrase/problem carefully.
2. Identify key words/operations and values/variables. ←
3. Define variables {let  $x = \underline{\hspace{2cm}}$ }
4. Translate into an inequality.
5. Solve.
6. Verify to see if answer makes sense.
7. Answer word problems in a complete sentence including correct units.

Key words:

- more than/greater than
- less than/fewer than
- at most/no more than
- at least/no less than

**Ex. 1:** Solve each problem by writing and solving an inequality.

- A.** A difference of a number and 15 is no more than -8.

- B.** 18 is at least the product of -6 and a number.

- C.** Thirty-four is fewer than the quotient a number and negative 2.

- D.** The difference of a number and 15 is at most negative 10.