

LESSON
8-3

Writing Two-Step Inequalities

Success for English Learners

Problem 1

To write an inequality from the words, remember clues:

- “Four times a number” $\longrightarrow 4n$
- “Five less than a number” $\longrightarrow n - 5$
- “Six more than a number” $\longrightarrow n + 6$
- “The opposite of 3” $\longrightarrow -3$
- “No more than a number” or
- “Less than or equal to a number” $\longrightarrow \leq n$
- “No less than a number” or
- “Greater than or equal to a number” $\longrightarrow \geq n$

Combine the clues to write an inequality with numbers:

“Five more than three times a number is no greater than the opposite of 6.”

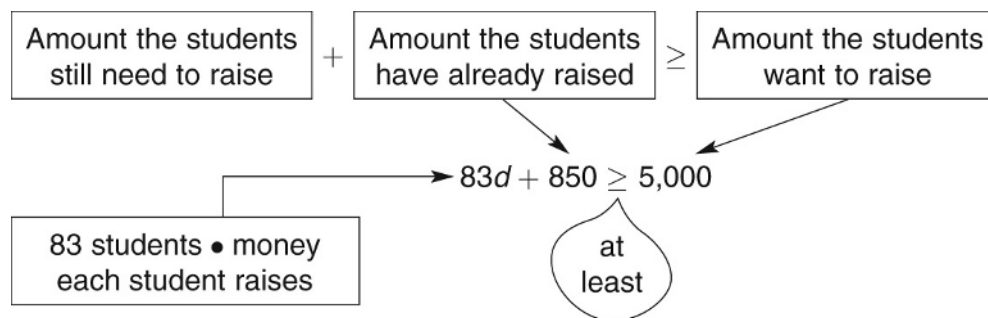
$$5 + 3n \leq -6$$

Problem 2

Look at the highlighted parts of the problem.

The seventh-grade students need to raise **at least \$5,000** for their class trip. They were **given \$850** by local businesses for the trip, but they have to raise the rest. If there are **83 students**, how much does each student need to raise?

Put the information in a chart like this:



Write the words or the numbers and symbols.

- Write the words for the numbers and symbols: $5 - 2x > -4$

- Write the numbers and symbols for this problem: “Three times a number minus 7 is less than or equal to the opposite of 10.”