Solve this inequality.

$7b + 3 - 5b + 10 > 11 + 2(b + 4)$

$2b + 13 > 11 + 2b + 8$

$2b + 13 > 19 + 2b$

$-2b \qquad -2b$

$13 > 19$

This statement is not true so the inequality will never be true.

NO SOLUTION

Expenses The sophomore class is planning a picnic. The cost of a permit to use a city park is $250. To pay for the permit, there is a fee of $.75 for each sophomore and $1.25 for each guest who is not a sophomore. Two hundred sophomores plan to attend. Write and solve an inequality to find how many guests must attend for the sophomores to pay for the permit.

$(.75)(200) + 1.25G \geq 250$ $\quad G = \#$ guests

$150 + 1.25G \geq 250$

$-150 \qquad -150$

$1.25G \geq 100$

$\frac{1.25G}{1.25} \geq \frac{100}{1.25}$

$G \geq 80$

They need at least 80 guests

Health Care Systolic blood pressure is the higher number in a blood pressure reading. It is measured as your heart muscle contracts. The formula $P \leq \frac{1}{2}a + 110$ gives the normal systolic blood pressure P based on age a.

a. At age 20, does 120 represent a maximum or a minimum normal systolic pressure?

b. Find the normal systolic blood pressure for a 50-year-old person.

a. Since the inequality is written as P is less than or equal to the pressure given by the formula that quantitiy must be the most or a Maximum.

b. Replace a with 50: 1/2(50) + 110 = 25 + 110 = 135

Normal pressure for a 50-year-old should be no more than 135.