## Writing Inequalities

Inequalities can be written to represent many situations.

## Examples:

## There are at least 25 students in the auditorium.

$n \geq 25$ "at least" means greater than or equal to
n represents the number of students in the auditorium
No more than 150 people can occupy the room.
$r \leq 150$ "no more than" means less than or equal to r represents the possible room capacity

## You Try:

## Write an inequality for each given situation.

1) You cannot eat more than 2 pieces of your Halloween candy per day. $\mathbf{x} \leq \mathbf{2}$
2) There are less than 15 people in the room.
3) There are at most 12 books on a shelf. $x \leq 12$
4) There are fewer than 200 people at the game.
5) You must get at least 30 minutes of exercise each day. $\mathbf{x} \geq 30$
6) You must be at least 15 years old to get your driver's permit.
7) A pony is less than 14.2 hands tall. $\mathbf{x}<\mathbf{1 4 . 2}$
8) You must be over 12 years old to ride the go karts.
9) The pig weighs at most 220 pounds. $\mathbf{x} \leq \mathbf{2 2 0}$
10) Every candy bar costs at least $\$ 2.20$.
11) You must complete at least $80 \%$ of your homework to attend the Homework Stars Celebration. $x \geq 80$
12) There are no more than seven people on the boat.
13) More than 40 people attended the movie last night. $x>40$
14) You must be under 54 " to ride the kiddie rides at Six Flags.
15) Getting at least 8 hours of sleep at night keeps you healthy. $x \geq 8$
