Writing Inequalities

Inequalities can be written to represent many situations.

Examples:

There are at least 25 students in the auditorium.

 $n \ge 25$ "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.

 $r \le 150$ "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. $x \le 2$
- 2) There are less than 15 people in the room.
- 3) There are at most 12 books on a shelf. $x \le 12$
- 4) There are fewer than 200 people at the game.
- 5) You must get at least 30 minutes of exercise each day.x ≥ 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. x < 14.2
- 8) You must be over 12 years old to ride the go karts.
- 9) The pig weighs at most 220 pounds. $x \le 220$
- 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 ≥ 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 ≥ 8