Intro to Inequalities Problem-Solving Practice

1. SAFETY The speed limit on some Georgia Interstates is 70 miles per hour. If a driver travels faster than 70 miles per hour, he or she receives a ticket. Use the inequality $s > 70$, where s represents the speed of cars on the interstate to determine which cars get a ticket.

Car	Speed
1	68
2	76
3	72
4	65

2. CAMERAS The cost of a camera at different stores is shown in the table. Kayla doesn't want to spend more than \$400 on a camera. Use the inequality $c < \$400$, where c represents the cost of a camera to determine which stores she could buy from.

Store	Cost
Camera Castle	\$389.50
Digital Dreams	\$401.75
Photo Palace	\$422.85

3. CONCERT The number of people who attended each theater show at the local arts club is shown in the table. If less than 175 people attend, then the arts club did not make enough to cover costs. Use the inequality $p < 175$, where p represents the number of people present, to determine for which show they did not make enough money.

Show	People Present
Romeo and Juliet	176
Hamlet	164
Macbeth	208

4. FLOWERS The florist kept track of the flowers she sold on Valentine's Day. If she sells at least 50 flowers, she receives a bonus. Use the inequality $f \geq 50$, where f represents the number of flowers sold to determine which flowers she sold enough of.

Flower	Number Sold
Roses	112
Tulips	68
Carnations	43

5. RIDES The roller coasters at the theme park require children to be over 48 inches tall to ride. Use the inequality $h \leq 48$, where h represents each child's height to determine which children can not ride roller coasters.

Child	Height (in.)
Jolon	47
Tandy	49
Cruz	48
Flo	50

6. BAKE SALE The school bake sale results are given in the table. If more than 20 of a baked good are sold, then more baked goods are made. Use the inequality $b > 20$, where b represents the number of goods sold to determine which baked goods need to be made.

Baked Goods	Number Sold
Cakes	10
Cookies	45
Cupcakes	38
Pies	15