

Writing a linear inequality in two variables given a table of values

Writing a linear inequality in two variables given a table of values

Ashley drives a truck for a soft drink company. Her truck contains only cans and bottles. The table below shows the weight (in ounces) of each of these items.

	Weight of each item (in ounces)
Can c	25
Bottle b	80

$$25c + 80b \leq 112,000$$

Let c be the number of cans the truck is carrying.
 Let b be the number of bottles the truck is carrying.

Suppose the truck can carry at most 112,000 ounces. Using the values and variables given, write an inequality describing this.

□=□

□<□

□>□

□≠□

□≤□

□≥□

□

×

↺

at most $\leq$
 at least $\geq$

Writing a linear inequality in two variables given a table of values

At her auto shop, Melissa does oil changes and tire changes. The table below shows how long (in minutes) it takes her to complete each of these services.

	Oil change	Tire change
Time to complete each service (in minutes)	12	24

Let x be the number of oil changes she does.
 Let y be the number of tire changes she does.

Suppose Melissa works for at most 180 minutes. Using the values and variables given, write an inequality describing this.

□=□

□<□

□>□

□≠□

□≤□

□≥□

□

×

↺

at least $\geq$
 at most $\leq$

$$12x + 24y \leq 180$$