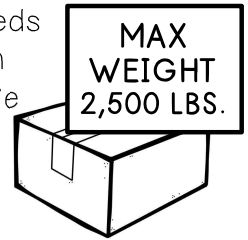


## WRITING INEQUALITIES

A freight elevator has a sign stating the maximum weight is 2,500 pounds. Jenny needs to place a dolly with 20 boxes on the elevator. The dolly weighs 500 pounds and each box weighs 100 pounds. How could Jenny determine if the dolly and boxes will be safe to put on the elevator?



$<$	$>$	$\leq$	$\geq$

Use a variable and an inequality symbol to represent each of the following descriptions.

1. Tim must take a minimum of 16 credit hours this semester.  _____	2. Fewer than 3.25 inches of snow fell last week.  _____	3. Demi needs to score no less than a 90 on her test.  _____
4. Inez must be over $4\frac{1}{2}$ feet tall to ride the roller coaster.  _____	5. La'Darian wants to spend no more than \$50 at the store.  _____	6. Blake wants to spend at most \$200 on gifts for his family.  _____

Determine the operations and inequality sign that could be used to set up an inequality.

7. Jenna has _____ in her savings account. Each week she tutors and earns _____. After how many weeks will she have at least _____ dollars?		
<b>BEGINNING SAVINGS</b>	<b>TUTORING</b>	<b>TOTAL SAVINGS</b>
8. The city water bill charges customers _____ per gallon of water used, plus a _____ sewage fee. The Burke family spent less than _____ on their water bill. How many gallons of water did The Burke family use?		
[ ]	[ ]	[ ]

Determine the operations and inequality sign that could be used to set up an inequality.

9. The Washington family is planning a trip to an amusement park. It will cost the Washington family \$355 to travel there, plus \$105 per day for park tickets. What is the greatest number of days the Washingtons can attend the amusement park while staying within their \$800 budget?

WORDS:

NUMBERS:

In 10-11, set up and solve an inequality for each situation.

10. The school fundraising committee is hosting a BBQ dinner. They sell meal tickets for \$8.50 per dinner and receive a \$200 donation. How many meal tickets will they need to sell in order to raise at least \$2,000?

Inequality: \_\_\_\_\_

Solution: \_\_\_\_\_

11. The weather channel reported overnight rainfall of 1.5 inches and an average of 0.5 inches each hour for the remainder of the day. After how many hours will there be more than 5 inches of rain?

Inequality: \_\_\_\_\_

Solution: \_\_\_\_\_

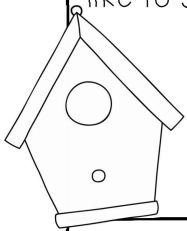
12. Sarah plans to sell birdhouses at an upcoming spring bazaar. It costs her \$5.00 to make each birdhouse, and she will pay a one-time fee of \$75 to rent her booth at the bazaar. If Sarah would like to spend no more than \$500 on the spring bazaar, how many birdhouses can she make?

A.  $5x + 500 > 75$

C.  $5x + 75 \geq 500$

B.  $5x + 75 < 500$

D.  $5x + 75 \leq 500$



13. Write a real-world problem that could be represented by the inequality below:

$$78 - 2x < 60$$

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## WRITING INEQUALITIES

In 1-4, write an inequality to represent each situation.

1. In order to get free shipping, the order must be at least \$35.

2. The fire code states that there is a maximum capacity of 360 people.

3. Miles sets a goal to get over 10,000 steps each day.

4. Fewer than 250 people attended the wedding.

In 5-6, choose the inequality that could be used to solve each problem.

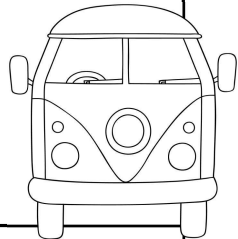
5. A new van is priced at \$19,500. If the buyer chooses to finance, they will pay \$5,000 as a down payment and \$375 per month. After how many months will the buyer have paid more than \$10,000 toward the van?

A.  $19,500 - 5000x > 10,000$

B.  $5,000 + 375x > 10,000$

C.  $5,000x + 375 > 10,000$

D.  $19,500 - 375x < 10,000$



6. A trampoline park charges \$5.50 per hour for kids and a flat \$3 admission fee for parents. Mrs. Bernard would like to take her son and spend no more than \$20 at the trampoline park. How many hours will her son be able to jump?

A.  $5.50x + 3 > 20$

B.  $5.50x + 3 \leq 20$

C.  $3x + 5.50 < 20$

D.  $3x + 5.50 \leq 20$

7. Write a real-world problem that could be represented by the inequality below.

$$300 - 15x < 200$$

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