Name	Period	
Sec1H	HW 2-3 Writing & Interpreting Compound Inequalities	Unit 2
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1. Potatoes go bad between three and five weeks, inclusive. Write an inequality to represent this.

2. The national weather service issues a drought warning if Utah receives less than 16 inches of snow in a winter. However, they must issue a flash flood warning if they Utah receives more than 100 inches of snow in a winter. Write an inequality to represent when they would have to send out a warning.

- 3. Mercury freezes at -38 degrees and boils at 674 degrees.
 - a. Write an inequality to indicate when it is NOT in liquid form
 - b. Write an inequality to indicate when it IS in liquid form.

4. A man is considered "normal" if 18-22% of his bodyweight is fat. If a man weighs 170 lbs, write an inequality to represent how much of his weight is fat if he is in this normal range.

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5. You are buying 3 tickets to Lagoon. Depending on where you buy them they could end up costing as little as \$113.85, or as much as \$176.85. Write an inequality to represent the cost of each ticket.

- 6. A motorcycle gets 40 mpg in the city and 59 mpg on the highway.
 - a. Write an inequality to describe how many miles the motorcycle will run per gallon.
 - b. The motorcycle gas tank holds 7 gallons. How many miles can the car travel with a full tank of gas?
- 7. Danielle got 50, 85, 90, and 95 on the standards on her last test. She plans to retake her lowest score. She wants to average at least a 90. What could her retake score be?

$30.6 \le x \le 37.4$	$40 \le x \le 59$	$37.95 \le x \le 58.95$
$x \le -38 \text{ or } x \ge 674$	$90 \le x \le 100$	<i>x</i> < 16 <i>or x</i> > 100
$3 \le x \le 5$	$280 \le x \le 413$	-38 < x < 674

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