Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Table #: \_\_\_\_\_\_\_ Period: \_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_

**4.3B Solving Inequalities Using Multiplication and Division\_Classwork**

*Objective: solve inequalities using multiplication or division; solve real-life problems. CC.SS.7.EE.4b*

*HW: 4.3B pg 143\_#10-23 ALL*

***WARM- UP***

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| Write in complete sentences to explain how to solve **x + 7 < -4**. Then graph the inequality when you are done explaining.  |

Write the word sentence as an inequality. Solve the inequality. Graph the inequality.

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| 1. The quotient of a number and 4 is at most 5. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | 2. A number divided by 7 is less than -3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 3. Six times a number is at least -24. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | 4. The product of 2 and a number is greater than 30. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

Solve and graph an inequality that represents x.

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| 1. | 2. |

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| 3.**AVOCADOS.** You have $9.60 to buy avocados for a guacamole recipe. Avocados cost $2.40 each.1. Write an inequality that represents the number of avocados you can buy.
2. Solve the inequality.
3. Are there infinitely many solutions in this context? Explain.
 | 4. **SCIENCE PROJECT.** Students in a science class are divided into 6 equal groups with at least 4 students in each group for a project. 1. Write an inequality that represents the number of students in the class.
2. Solve the inequality.
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| **Write the word sentence as an inequality. Then solve the inequality** |
| 1. A number divided by 5 is at least 4.
 | 1. The product of 2 and a number is at most -6.
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| 1. Five times a number is not less than 15.
 | 1. The quotient of a number and 4 is less than -1.
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| 1. An SUV averages 16.5 miles per gallon. The maximum average number of miles that can be driven on a full tank of gas is 363 miles. Write and solve an inequality that represents the number of gallons in a tank.
 | 1. It is currently 0 degree C outside. The temperature is dropping 2.5 degrees C every hour. Write and solve an inequality that represents the number of hours that must pass for the temperature to drop below -40 degrees C.
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