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

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

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

*HW: worksheet 4.3A*

|  |  |  |  |
| --- | --- | --- | --- |
| **WARM-UP: solve for**

|  |  |  |
| --- | --- | --- |
| 1. $3x=-12$
 | 1. $\frac{x}{5}=-1.5$
 | 1. $5x=\frac{2}{5}$
 |

 |

|  |  |
| --- | --- |
| **EXAMPLE 1**$$Solve and graph. -1.5>0.5x$$ | **EXAMPLE 2**$$Solve and graph. \frac{5}{2}>\frac{x}{5}$$ |
| **1.**$$Solve and graph. \frac{2}{3}<2x$$ | **2.**$$Solve and graph. \frac{x}{2}\geq \frac{3}{2}$$ |
| **3.**$$Solve and graph. \frac{x}{1.5}\leq -4$$ | **4.** $$Solve and graph. 1.5x>\frac{3}{2}$$  |

PRACTICE PROBLEMS: Solve the inequality. Graph the solution.

 1.  2.  3. $20m>-80$



 4. $3n\geq 91.5$ 5. $4x<\frac{2}{3}$ 6. 



 7. $\frac{r}{4}\leq -10$ 8. $\frac{x}{5}>2.5$ 9. $-2\geq \frac{q}{0.3}$



 10. To win a game, you need at least 45 points. Each question is worth
3 points. Write and solve an inequality that represents the number of questions you need to answer correctly to win the game.