

Due Date: \_\_\_\_\_

## Equations vs. Inequalities Book Project

**Background:** When we solve equations and inequalities, the steps to obtain the solution are similar. However, there are also differences. In this project, you will create a book that highlights the similarities and differences between equations and inequalities.

**Project:** Create a book showing the differences and similarities between equations and inequalities. You will need to create and solve your own examples with an explanation of your work (use words). Except for pages 3 and 4, each page should have 'twin' examples (i.e.  $2x + 4 = 8$ ,  $2x + 4 > 8$ ). Each inequality should also be graphed on the number line.

### Include:

- Cover (creative, unique, colorful; includes title, name, and date)
- Page 1: One step equation and inequality (explain how to solve, graph inequality)
- Page 2: Two-step equation and inequality (explain how to solve, graph inequality)
- Page 3: Special case for inequalities (explain how to solve, switch inequality sign, graph)
- Page 4: Compound inequalities (1 and, 1 or; explain difference between the two types of compound inequalities, graphs)
- Page 5: Multi-step equation and inequality (distribute or combine like terms, graph inequality)
- Page 6: Summary - Explain how equations and inequalities are similar and different in a few complete sentences.

### Grading:

Cover	5 pts	
Page 1	5 pts	
Page 2	5 pts	
Page 3	5 pts	
Page 4	5 pts	
Page 5	5 pts	
Page 6	5 pts	
Grammar, spelling, neatness		5 pts
<b>Total</b>	<b>40 pts</b>	

**Late Projects will have 4 pts deducted per day.**

