Practice worksheet | Linear equations and inequalities

One/no/infinite solutions

Name: _____ Date: _____

6 questions | 14 marks

1. Classify the solution set of $y = 2x + 3$ and $y = -x + 6$. [2 marks]

2. Classify $x - y = 4$ and $2x - 2y = 8$. [2 marks]

3. Classify $3x + y = 7$ and $6x + 2y = 9$. [2 marks]

4. Explain why $0 = 0$ does not mean that every pair of real numbers solves $x + y = 2$ and $2x + 2y = 4$. [3 marks]

5. Find the value of k for which $y = 3x + 5$ and $y = 3x + k$ have infinitely many solutions. [2 marks]

6. Two taxi companies charge the same 2 dollars per kilometre. Their starting fees are 4 and 7 dollars. Can the trip prices ever be equal for the same distance? [3 marks]