

How Many Solutions Are There? – Linear Equations

Period _____

Name _____

For the following questions, circle the number of solutions. Then state clearly how you determined your answer. NOTE: You may refer to the **actual solution**, but we are looking for the **number** of correct solutions.

How Many solutions are there to the following problems? Circle your answer.	Explain the reasoning you used to determine your answer. You may use diagrams and symbols, but should explain in words how you arrived at the answer.
1. $2x = 30$ 0 1 2 3 ∞	
2. $2x = 7$ 0 1 2 3 ∞	
3. $3x = -12$ 0 1 2 3 ∞	
4. $4x = 21$ 0 1 2 3 ∞	
5. $5x + 1 = 5x + 1$ 0 1 2 3 ∞	
6. $3x + 1 = 3x - 2$ 0 1 2 3 ∞	
7. $2(x + 1) = 2x + 1$ 0 1 2 3 ∞	