

Multiply the second equation by  $-3$  and add it to the first equation. The resulting equation is  $0 = 0$ . This indicates the potential for an infinite number of solutions. You need to check the remaining equation. If you multiply the second equation by  $2$  and add it to the third equation, the resulting statement is also  $0 = 0$ . This means all the points are on one plane, so there are an infinite number of solutions.