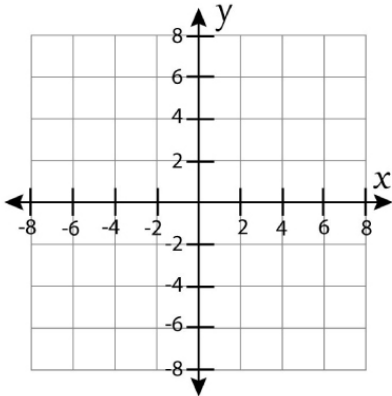


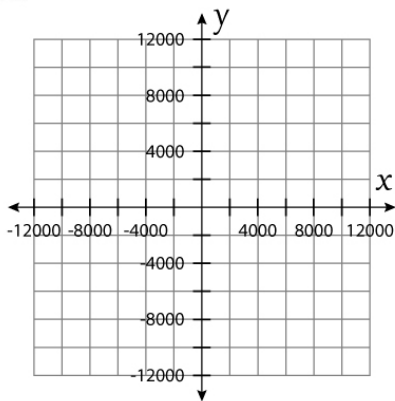
# Solving Systems of Equations by Graphing - Word Problems

Solve the following word problems. Write a system of equations and then solve them by graphing.

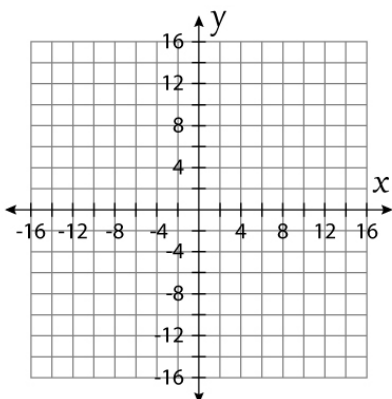
- ① The sum of twice a number and four times another number is 4. The difference of the two numbers is 5. Find the number.



- ② A diagnostic lab needs to make 3200 gallons of 42% acid solution by mixing a 36% acid solution with a 54% solution. Find the number of gallons needed of each solution.



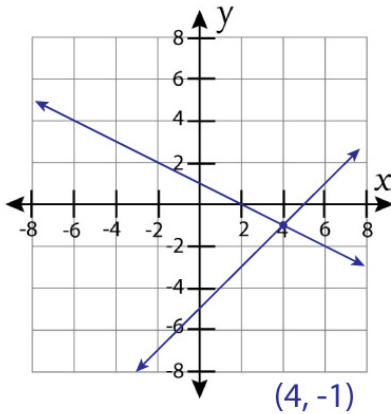
- ③ 11 times one number is 9 more than 8 times another number. The first number minus 4 is half the second number. Find the numbers.



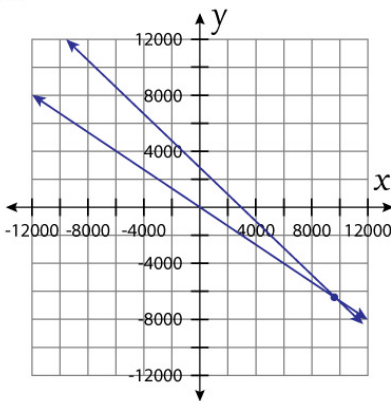
# Solving Systems of Equations by Graphing - Word Problems

## Answers

- ① The sum of twice a number and four times another number is 4. The difference of the two numbers is 5. Find the number.



- ② A diagnostic lab needs to make 3200 gallons of 42% acid solution by mixing a 36% acid solution with a 54% solution. Find the number of gallons needed of each solution.



36% acid solution – 2133.33 gallons  
54% acid solution – 1066.67 gallons

- ③ 11 times one number is 9 more than 8 times another number. The first number minus 4 is half the second number. Find the numbers.

