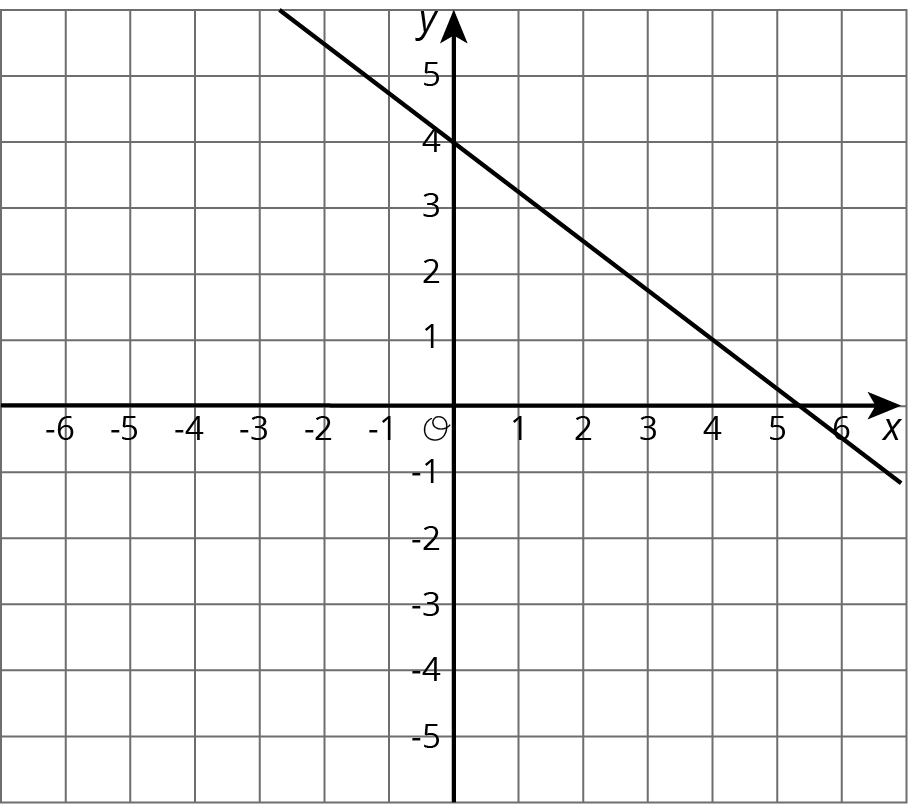
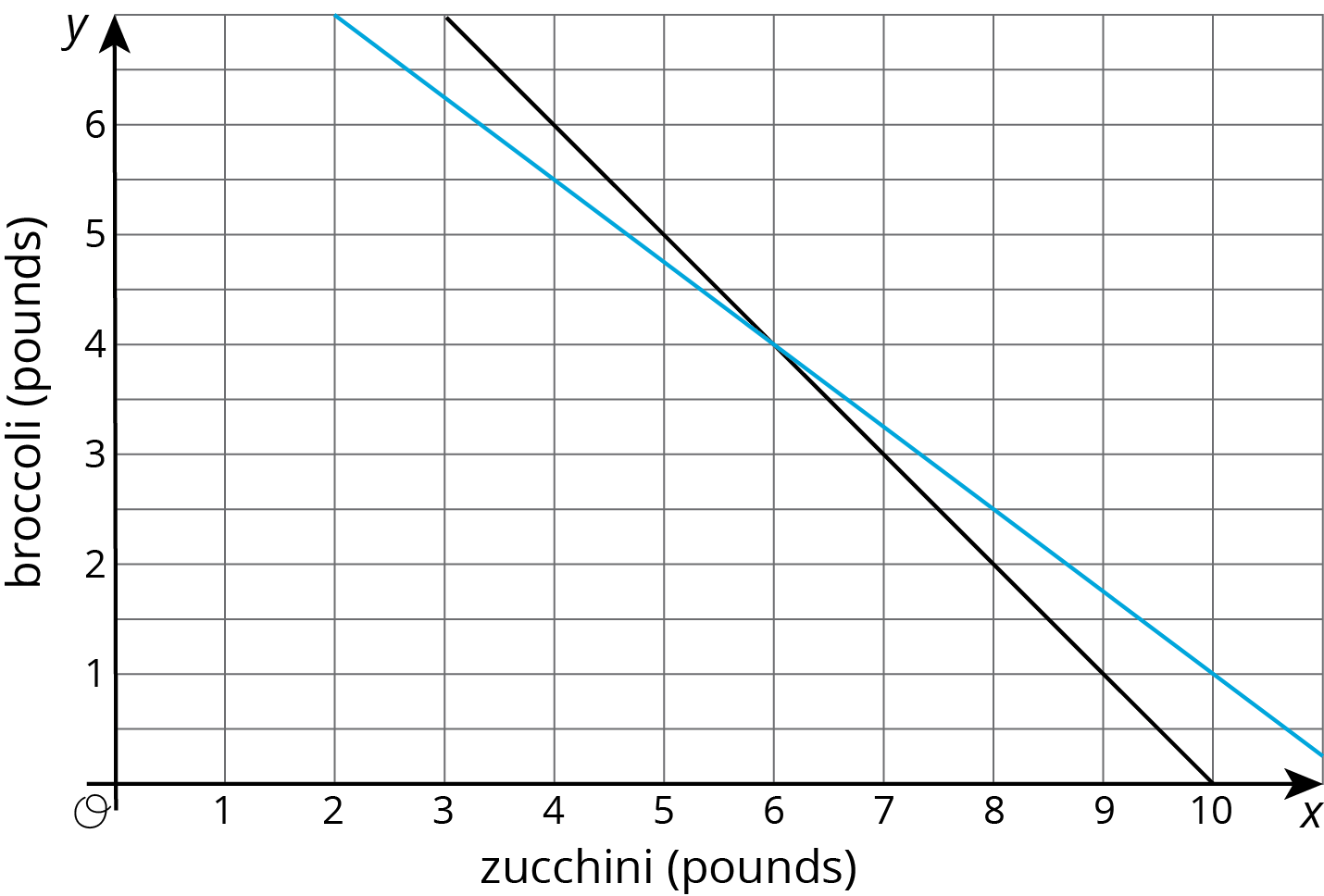
## Unit 4 Lesson 12 Cumulative Practice Problems

1. Here is the graph for one equation in a system of equations:

* 
  1. Write a second equation for the system so it has infinitely many solutions.
  2. Write a second equation whose graph goes through so the system has no solutions.
  3. Write a second equation whose graph goes through so the system has one solution at .

1. Create a second equation so the system has no solutions.
2. Andre is in charge of cooking broccoli and zucchini for a large group. He has to spend all $17 he has and can carry 10 pounds of veggies. Zucchini costs $1.50 per pound and broccoli costs $2 per pound. One graph shows combinations of zucchini and broccoli that weigh 10 pounds and the other shows combinations of zucchini and broccoli that cost $17.

* 
  1. Name one combination of veggies that weighs 10 pounds but does not cost $17.
  2. Name one combination of veggies that costs $17 but does not weigh 10 pounds.
  3. How many pounds each of zucchini and broccoli can Andre get so that he spends all $17 and gets 10 pounds of veggies?
* (From Unit 4, Lesson 10.)

1. The temperature in degrees Fahrenheit, , is related to the temperature in degrees Celsius, , by the equation
   1. In the Sahara desert, temperatures often reach 50 degrees Celsius. How many degrees Fahrenheit is this?
   2. In parts of Alaska, the temperatures can reach -60 degrees Fahrenheit. How many degrees Celsius is this?
   3. There is one temperature where the degrees Fahrenheit and degrees Celsius are the same, so that . Use the expression from the equation, where is expressed in terms of , to solve for this temperature.

* (From Unit 4, Lesson 9.)



© CC BY Open Up Resources. Adaptations CC BY IM.