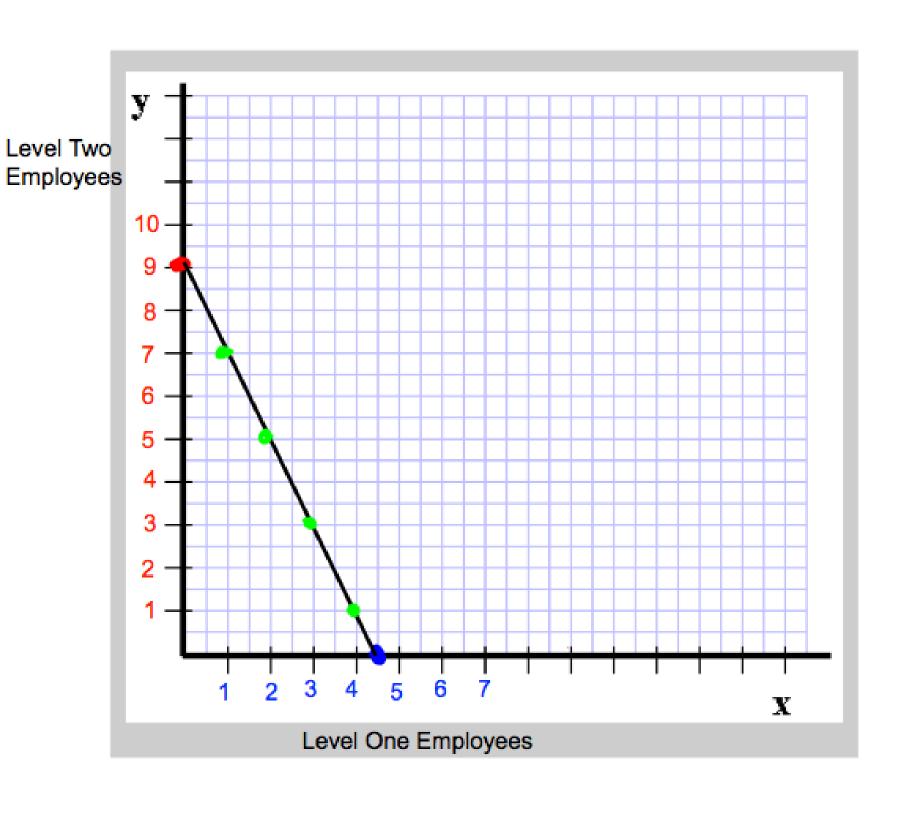# Story Problems: Using Equations and Intercepts to Solve

At a local store, Level 1 employees earn $48,000 and Level 2 employees earn $24,000. Write a linear equation that can be used to determine how many employees at each level the company can hire for $216,000. Graph the equation using intercepts. Then, find two possible solutions.

Let x = _# of level 1 ees_

Let y = _# of level 2 ees_

Linear Equation $48000x + 24000y = 216000$

Finding the X-Intercept $(4.5, 0)$

Finding the Y-Intercept $(0, 9)$

x	y
	0
0	

Possible Solutions include:

4 Level 1 employees and 1 Level 2 employee.
3 Level 1 employees and 3 Level 2 employees.
2 Level 1 employees and 5 Level 2 employees.
1 Level 1 employees and 7 Level 2 employees.
0 Level 1 employees and 3 Level 2 employees.