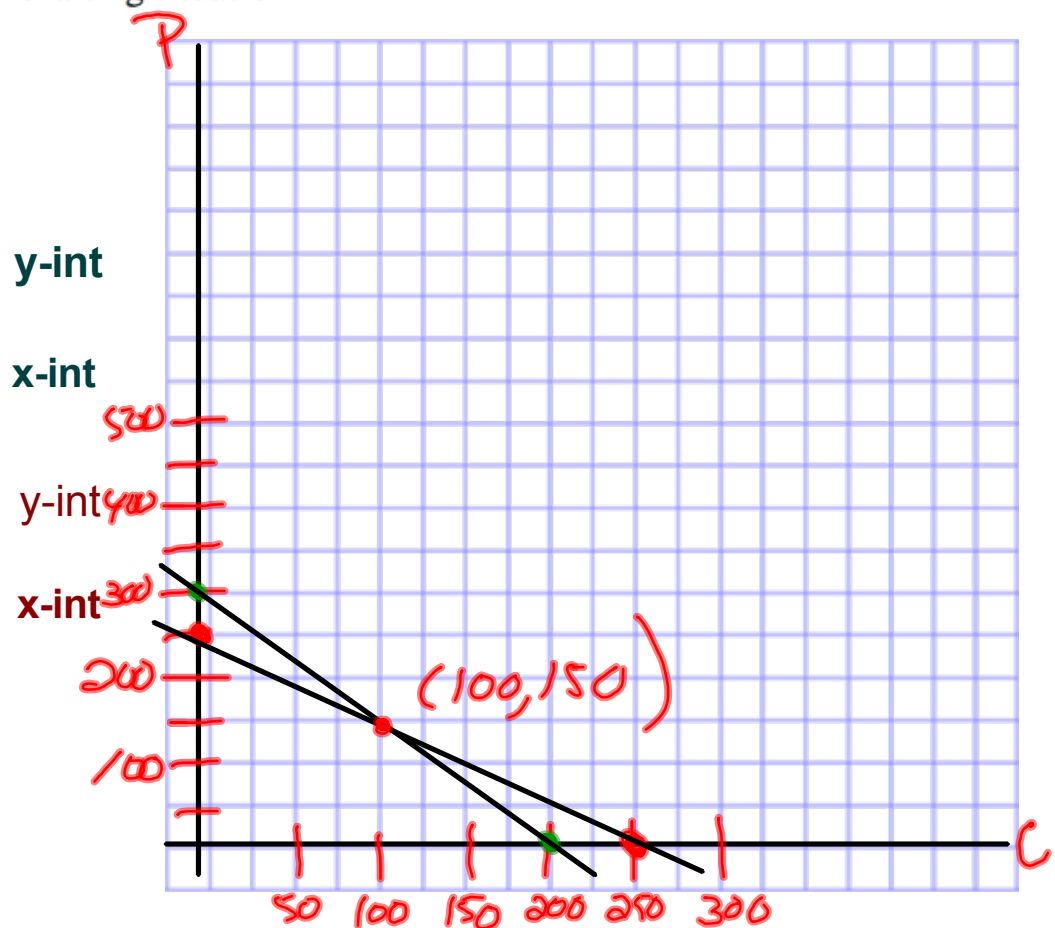


10. In Exercise 1, one equation relating the calendar and poster sales to the \$600 goal is $3c + 2p = 600$. Suppose the company donating the calendars and posters said they would provide a total of 250 items.

- a. What equation relates c and p to the 250 items donated? $c + p = 250$
- b. Graph both equations on the same grid. Find the coordinates of the intersection point. Explain what these coordinates tell you about the fundraising situation.

X	Y
0	300
200	0
0	250
250	0



11. In Exercise 2, one equation relating Neema's quarters and dimes to her goal of \$10 (1,000 cents) is $25x + 10y = 1,000$. Suppose Neema collects 70 coins to reach her goal.

- What equation relates x and y to the number of coins Neema collected?
- Graph both equations on the same grid. Find the coordinates of the intersection point. Explain what these coordinates tell you about this situation.

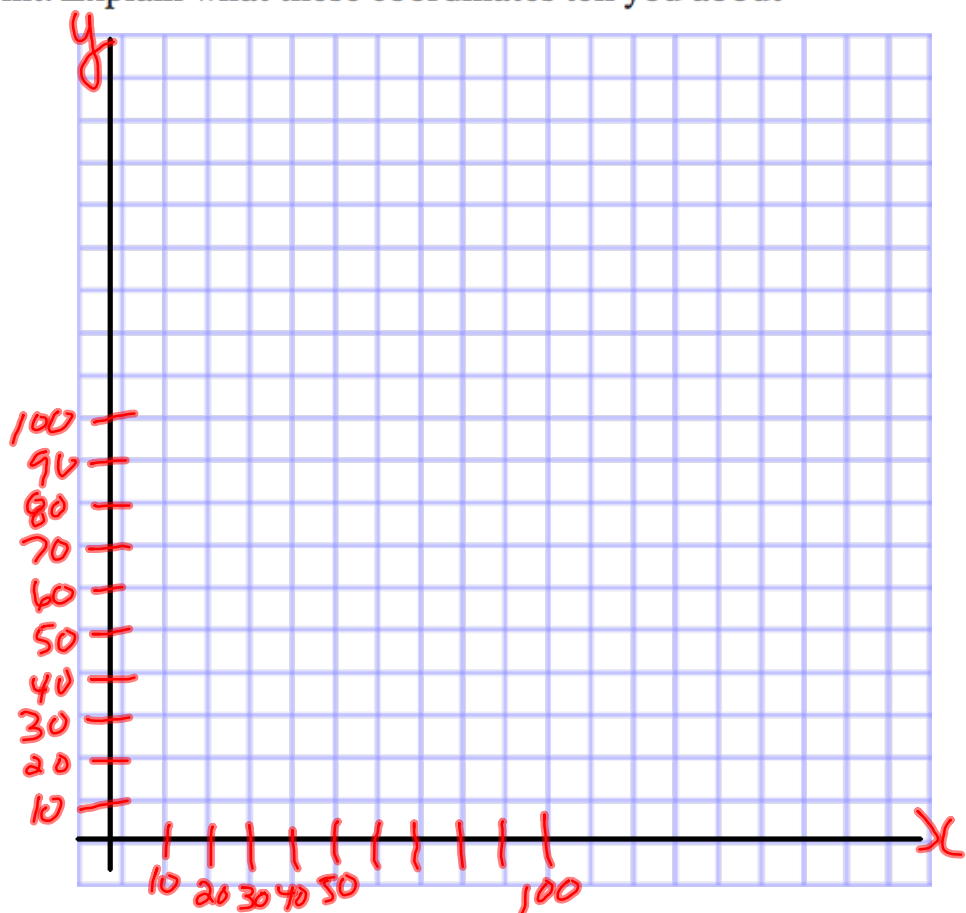
X	Y
0	
	0
0	
	0

y-int

x-int

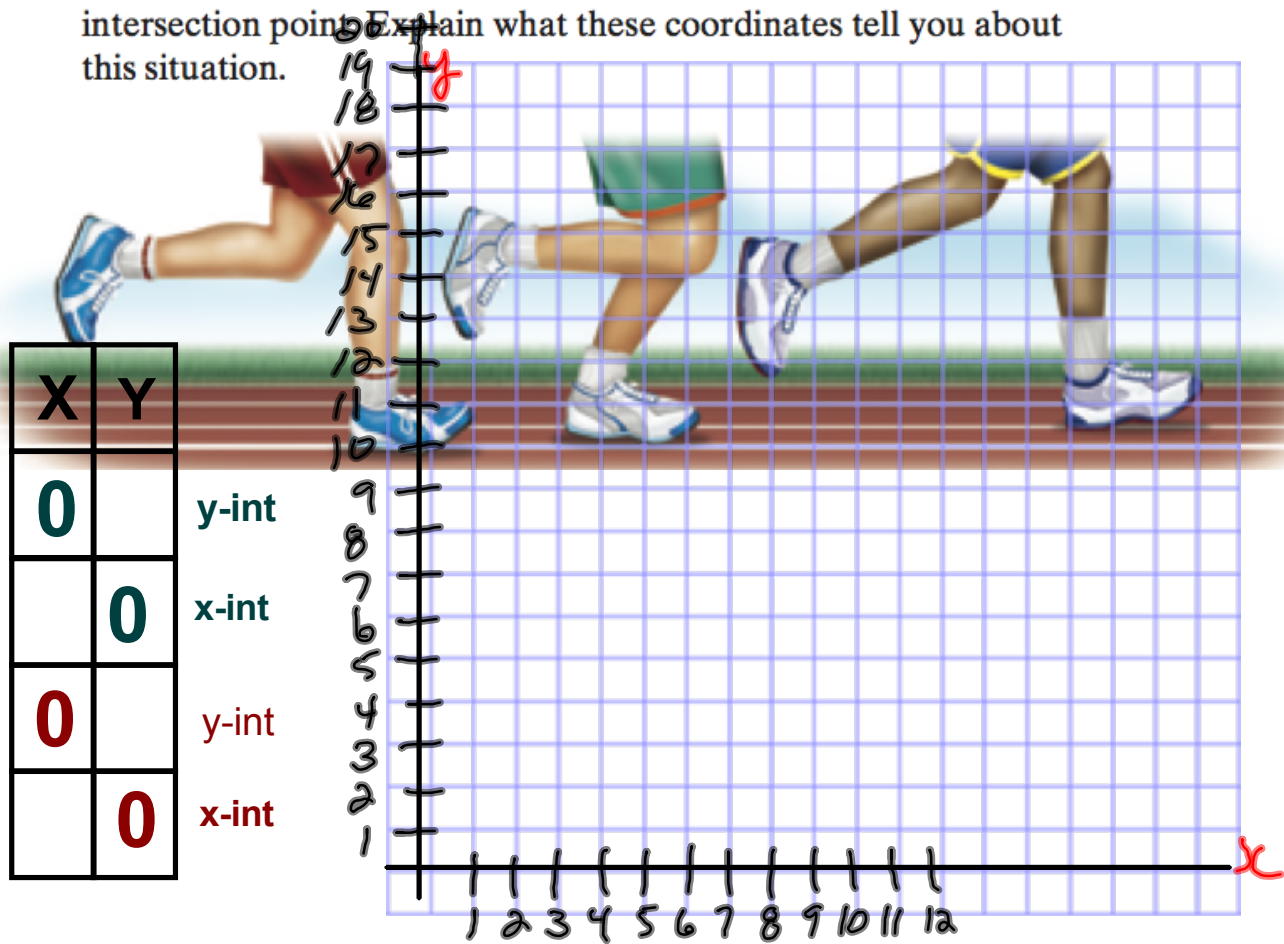
y-int

x-int



- 12.** In Exercise 3, one equation relating the times Eric spends running and walking to the goal of covering 1,600 meters is $200x + 80y = 1,600$. Suppose Eric runs and walks for a total of 12 minutes to reach his goal.

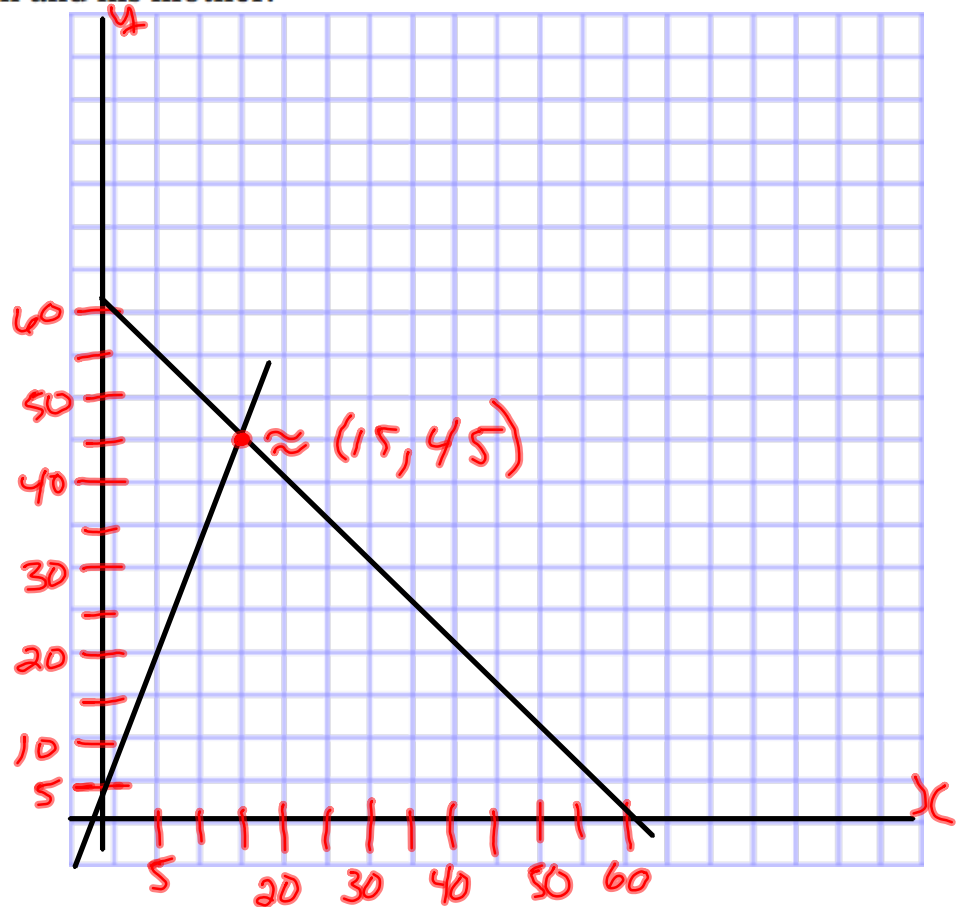
- What equation relates x and y to Eric's total time?
- Graph both equations on the same grid. Find the coordinates of the intersection point. Explain what these coordinates tell you about this situation.



13. In Exercise 4, one equation relating the ages of Kevin and his mother is $y - 3x = 1$. The sum of Kevin's age and his mother's age is 61 years.

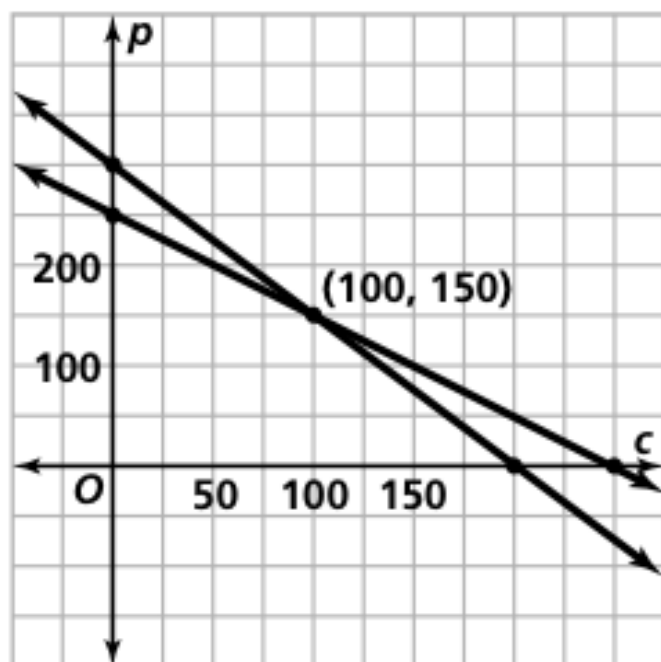
- a. What equation relates Kevin's and his mother's ages to their total age?
 $x + y = 61$
- b. Graph both equations on the same grid. Find the coordinates of the intersection point. Explain what these coordinates tell you about the ages of Kevin and his mother.

X	Y	
0	1	y-int
$\frac{1}{3}$	0	x-int
0	61	y-int
61	0	x-int



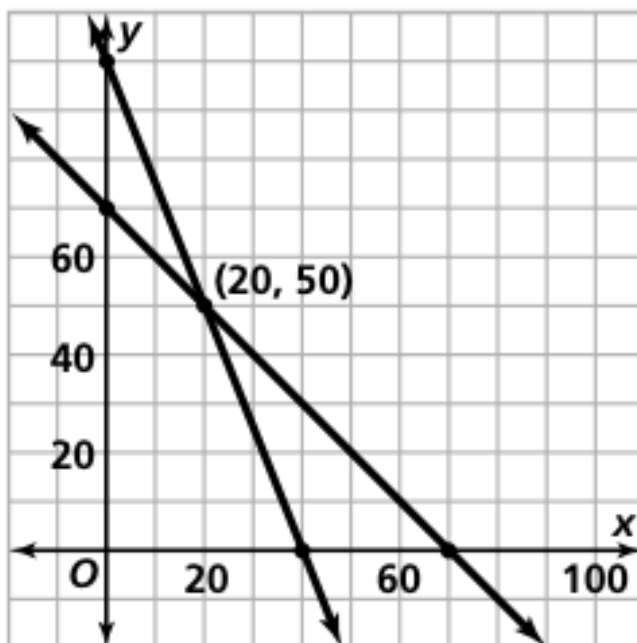
10. a. $c + p = 250$

- b. The graphs intersect at $(100, 150)$, meaning that 100 calendars and 150 posters will meet the limit of the donor and also the goal of earning \$600 for the fund-raiser.



11. a. $x + y = 70$

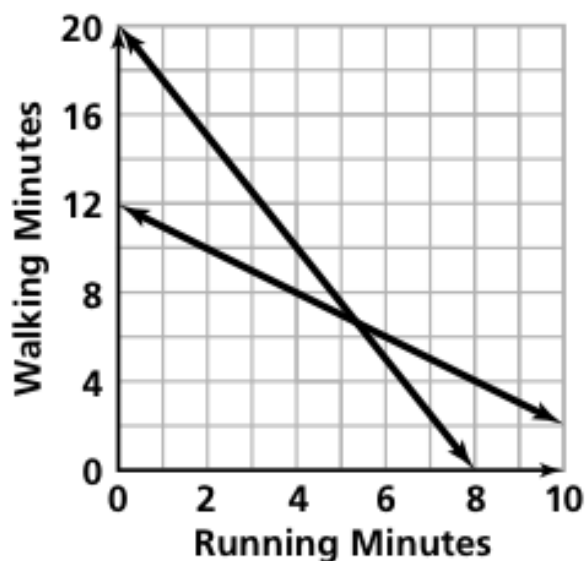
- b. The graphs intersect at $(20, 50)$, meaning that 20 quarters and 50 dimes will meet the condition of 70 coins and value of 1,000 cents.



12. a. $x + y = 12$

b. The intersection point is $(5\frac{1}{3}, 6\frac{2}{3})$, though

from the graph students might only estimate $(5, 7)$ or perhaps $(5.5, 6.5)$. This means that if one runs for a bit more than 5 minutes and walks for a bit less than 7 minutes at the predicted speeds, the goal of 1,600 meters in 12 minutes should be reached.



13. a. $x + y = 61$

- b. The intersection point is (15, 46) meaning that Kevin is 15 and his mother is 46, though from the graph students might only be able to estimate (15, 45).

