

5.2.2 # 32, 37-40

5-32 Table:

Latanya		George	
x	y	x	y
weeks	Savings	weeks	Savings
0	50	0	75
1	80	1	100
2	110	2	125
3	140	3	150
4	170	4	175
5	200	5	200
6	230	6	225
7	260	7	250
x	$y = 30x + 50$	x	$y = 25x + 75$

Rule: Equal Values Method (EVM)

$x = \text{weeks}$ Latanya: $y = 30x + 50$
 $y = \text{savings}$ George: $y = 25x + 75$

$$25x + 75 = 30x + 50$$

$$-25x \quad -25x$$

$$75 = 5x + 50$$

$$-50 \quad -50$$

$$25 = 5x$$

$$\frac{25}{5} = \frac{5x}{5}$$

$$5 = x$$

$$y = 25(5) + 75$$

$$y = 125 + 75$$

$$y = 200$$

At 5 weeks they both have \$200 in their savings accounts.

Graph:

