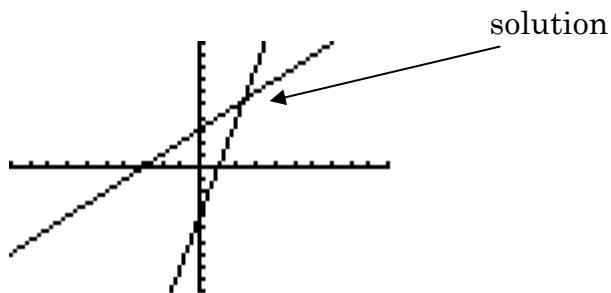


**Enrichment**  
**Objective 4.03**  
**Finding the Solution of Linear Systems**

Use your graphing calculator to find the solution of the system.  
 \*The solution is where the two lines intersect.

$y = 4x - 4$   
 $y = x + 3$

Step 1: Enter equations in Y=  
 Step 2: Graph

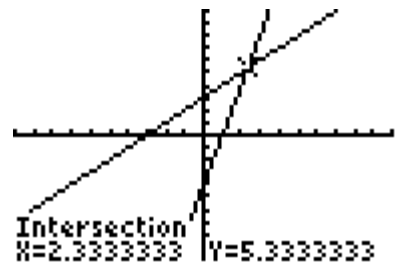
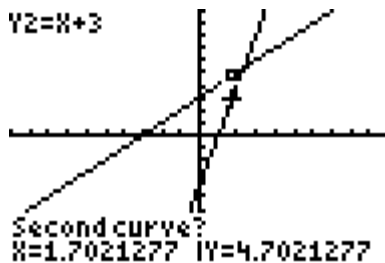
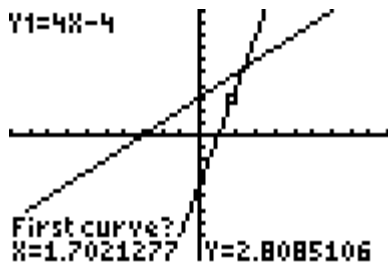


Step 3: 2<sup>nd</sup> Trace (Calc) #5: intersect

First curve? Enter

Second curve? Enter

Guess? Enter



The solution of the system is  $(2.3, 5.3)$  or  $(2\frac{1}{3}, 5\frac{1}{3})$

Let's try another one:

$$y = 5x + 1$$

$$y = \frac{2}{3}x - 3$$

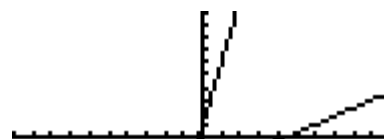
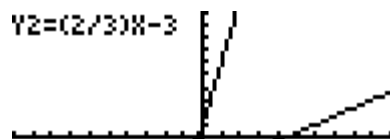
First curve? Enter

Second curve? Enter

Guess? Enter

$$Y1=5X+1$$

$$Y2=(2/3)X-3$$



First curve?  
X=-.4255319 Y=-1.12766

Second curve?  
X=-.4255319 Y=-3.283688

Intersection  
X=-.9230769 Y=-3.615385

The solution is  $(-.92, -3.6)$

You try:

1.  $y = 3.2x + 4.5$   
 $y = -8.7x - 6.1$

2.  $y = -0.2x + 2$   
 $y = 0.3x + 4$

3.  $y = 5x - 2.5$   
 $y = 0.5x - 1$

Answers: 1.  $(-.9, 1.6)$  2.  $(-4, 2.8)$  3.  $(.33, -.83)$