Key

Systems Review for Quiz

1. Write a system and solve:

A florist is making **5** identical bridesmaid bouquets for a wedding. She has **$610** to spend (including tax) and wants **24** flowers for each bouquet. Roses cost **$6** each, tulips cost **$4** each, and lilies cost **$3** each. She wants to have twice as many roses as the other **2** flowers combined in each bouquet. How many roses, tulips, and lilies are in each bouquet?

$6r + 4t + 3L = 610$

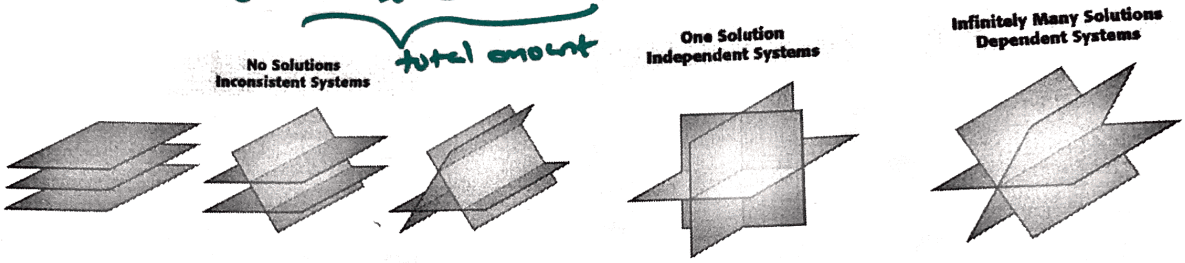
$r = 2(t + L)$

$r + t + L = 5(24)$

$t = 10 \quad l = 30 \quad r = 80$ (total amount)

In each bouquet:
16 roses
2 tulips
6 lilies

2. Study :



3. Solve the Linear-Quadratic System by Graphing and by Substitution. $\begin{cases} y = x^2 - 2x + 2 \\ y = 2x - 2 \end{cases}$

$\frac{-(-2)}{2(1)} = \frac{2}{2} = 1$

$(1, 1) =$ vertex

$x^2 - 2x + 2 = 2x - 2$

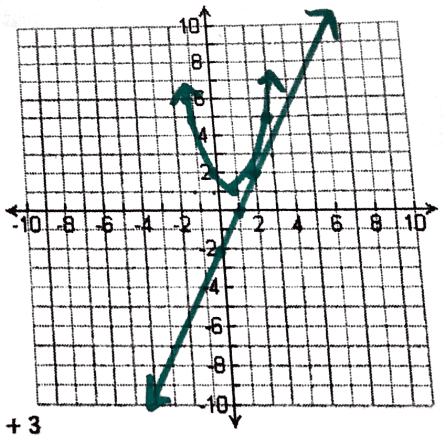
$-2x \quad +2 \quad -2x \quad +2$

$x^2 - 4x + 4 = 0$

$(x-2)^2 = 0$

$x = 2$

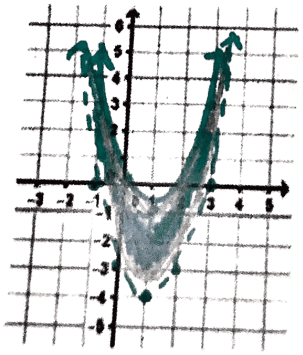
$(2, 2)$



4. Graph and shade the solutions:

$y > x^2 - 2x - 3$

vertex: (1, -4)
y-intercept: (0, -3)
2 other points:
(-2, 5) (4, 5)



$y \leq x(x-2)$

x-int: (0, 0), (2, 0)
vertex: (1, -1)
2 other points:
(3, 3) (-1, 3)

$y \leq (x+2)^2$

vertex: (-2, 0)
y-intercept: (0, 4)
2 other points:
(-5, 9) (1, 9)

$y > \frac{1}{2}x + 3$

slope: 1/2
y-intercept: (0, 3)