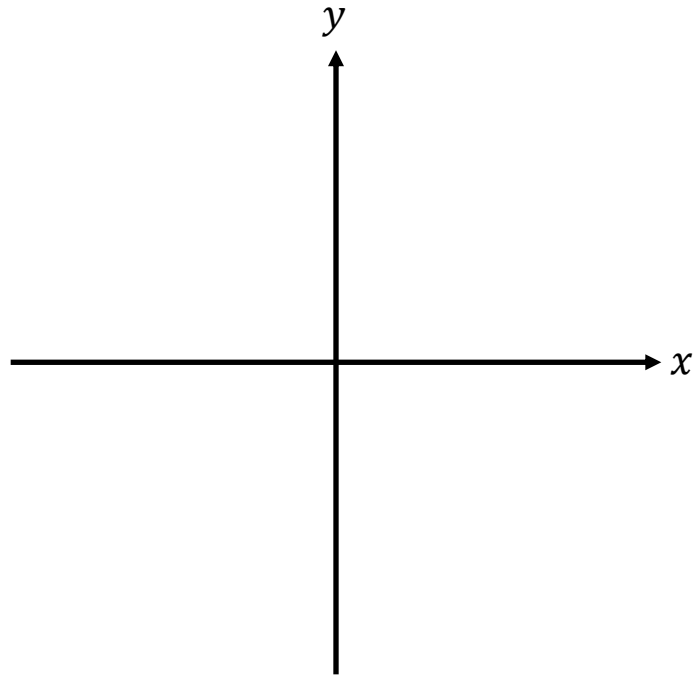


3C Simultaneous Equations Graphically (With the Discriminant)

1. Draw the graphs of the following equations and use it to write down their solution:

$$2x + 3y = 10$$

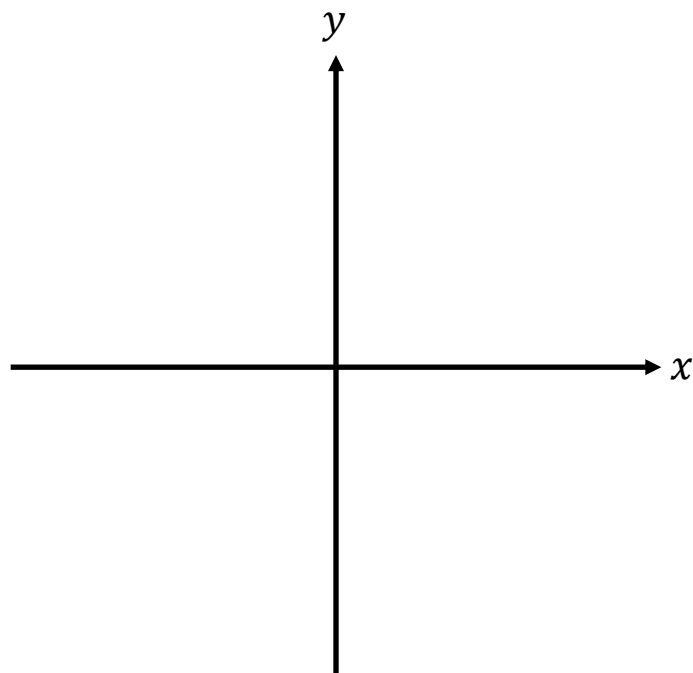
$$3x - y = 4$$



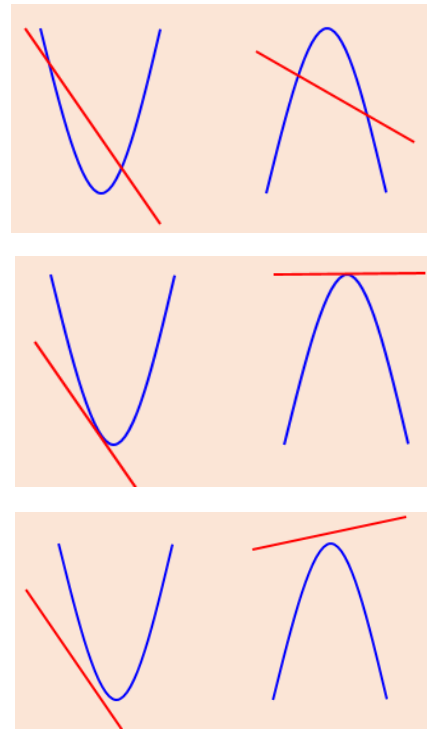
1. Draw the graphs of the following equations and use it to write down their solution:

$$2x + y = 3$$

$$y = x^2 - 3x + 1$$



Notes on the discriminant:



2. The line with equation $y = 2x + 1$ meets the curve with equation $kx^2 + 2y + (k - 2) = 0$ at exactly one point. Given that k is a positive constant:
- a) Find the value of k

- b) For this value of k , find the coordinates of the point of intersection