1. f(x) = x2− x + 1

=> x2− x + 1 = 0

=> let us assign the coefficients as: a = 1; b = -1; c = 1

x = [-b (+ or -) √(b2 -4ac)]/2a

= [-(-1) (+ or -)√(-1)2 -4\*1\*1)]/2\*1

= [1 (+ or -)√(-1) 2-4)]/2

x= (1+√-3)/2 or (1-√-3)/2

2. f(x)= x2− √x

=> x2− √x = 0

=> (√x)4− √x = 0

=> √x ((√x)3 – 1) = 0

let √x = y

=> y (y3 – 1)= 0

=> y3 – 1 = 0/y

=> y3 – 1 = 0

=> y3 = 1

=> y = 3√1

=> y = 1

3 . f(x)= x2−20x

=> x2−20x = 0

=> x2−4x −16x = 0

=> x(x − 4) – 16x = 0

=> x(x − 4) = 16x

=> (x − 4) = 16x /x

=> x – 4 = 16

=> x = 20

4. f(x,y)= x2 + y2−2xy

=> x2 + y2−2xy = 0

=> x2 −2xy + y2= 0

=> x2 −xy − xy + y2= 0

=> x(x-y) -1 (x-y) = 0

=> (x-1)(x-y) = 0

=> x = 1; y = x = 1