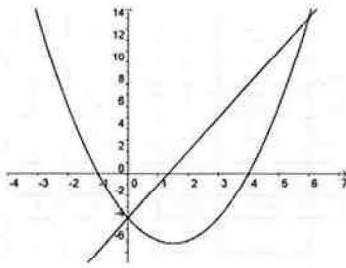


d)

Solving simultaneously $3x - 4 = x^2 - 3x - 4$

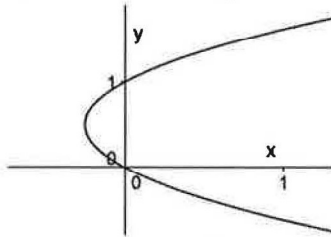
$x^2 - 6x = 0$ so $x = 0, 6$

Area = $\int_0^6 3x - 4 - (x^2 - 3x - 4) dx$



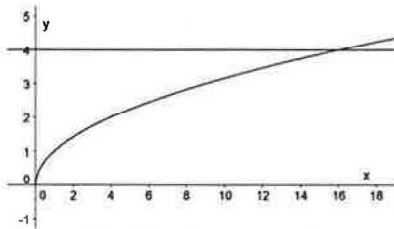
e)

$$A = -\int_0^1 y^2 - y dy \text{ or } \left| \int_0^1 y^2 - y dy \right|$$



f)

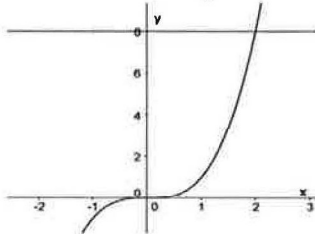
$$A = \int_a^b x dy = \int_0^4 y^2 dy$$



g)

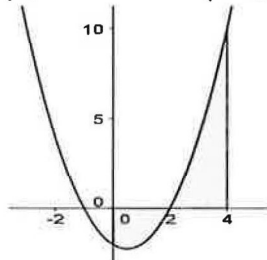
(2,8) is the point of intersection of the two curves

$A = 16 - \int_0^2 x^3 dx$ (with x axis) or $A = \int_0^8 y^{\frac{1}{3}} dy$ (with the y axis)



h)

$$\left| \int_0^2 x^2 - x - 2 dx \right| + \int_2^4 x^2 - x - 2 dx$$



3.

a)

Solving equations simultaneously $x^3 - 7x + 6 = 2x + 6$