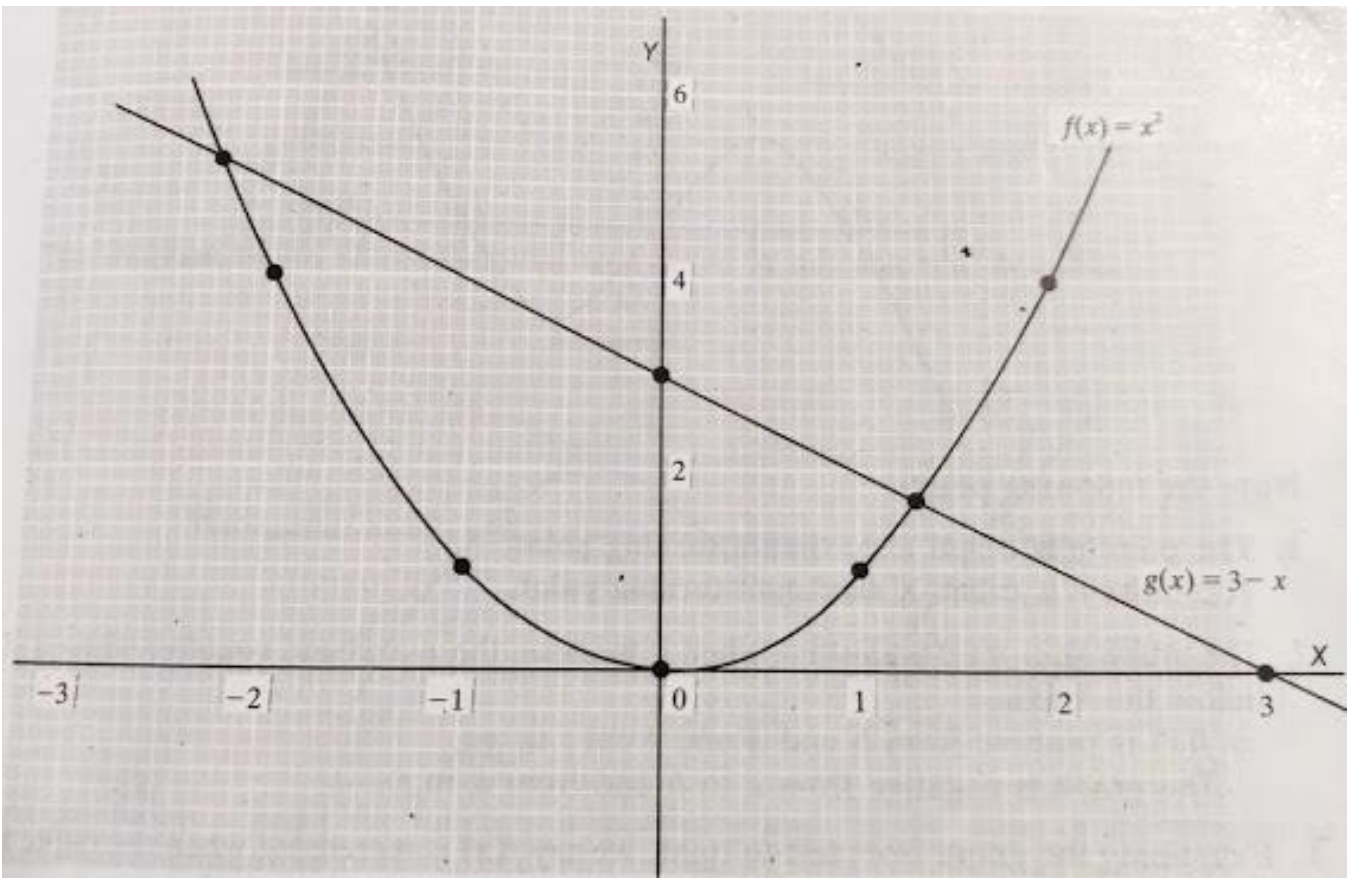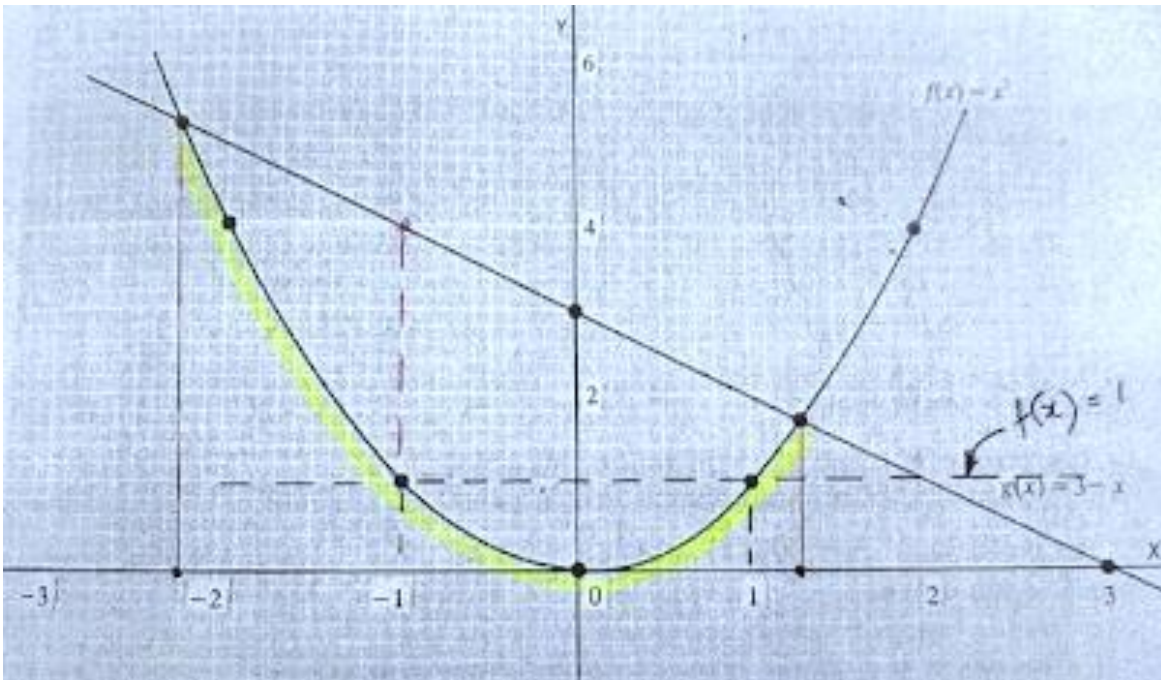$f(x) = x^2$ $g(x) = 3 - x$

Use the graph to find

(i) the values of x for which $f(x) = g(x)$

(ii) the range of values for x in the domain $-3 \le x \le 2$ for which $f(x) \le g(x)$

(iii) the range of values of x for which $f(x) \le 1$

(iv) the value of $f(x) + g(x)$ when $x = -1$

(v) the value of $f(x) - g(x)$ when $x = 0$

i. -2.3, 1.3

ii. -2.3≤x≤1.3

iii. -1≤x≤1

iv. $f(x) = 1, g(x) = 4 \; therefore \; f(x) + \; g(x) = 1 + 4 = 5$

v. $f(x) = 0, g(x) = 3 \; therefore \; f(x) - \; g(x) = 0 - 3 = -3$