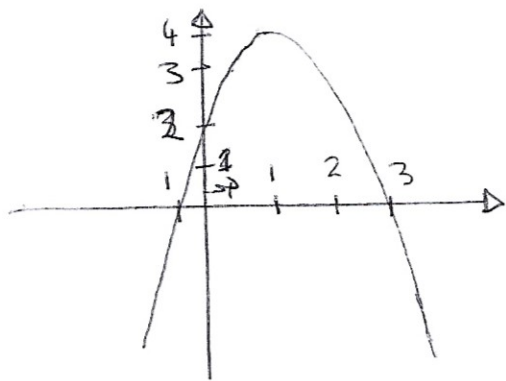




(a) What is the turning point of the graph? [1]

(b) What is the value of $f(3)$? [1]

(c) Where will the graph $2f(x+3)$ intercept the x -axis? [2]

Describe the following transformation of the graph $f(x)$.

(i) $f(x-2)$

(ii) $f(2x)$

(iii) $2f(x)$

[3]

(iv) $-f(x)$

(v) $f(x)+2$

(vi) $f(-x)$