Q5 $f(x) = 2x^2 + 3x - 6$, $x \in R$ $\{-4 \leq x \leq 3\}$

x	-4	-3	-2	-1	0	1	2	3	4
$2x^2$	32	18	8	2	0	2	8	18	32
$3x$	-12	-9	-6	-3	0	3	6	9	12
-6	-6	-6	-6	-6	-6	-6	-6	-6	-6
$f(x)$	14	3	-4	-7	-6	-1	8	21	38

(i) Roots of $f(x) = 0$

$x = -2.65$ and $x = 1.15$

(ii) x-values for $f(x) > 0$ ($f(x) > 0$ positive)

$\{-4 \leq x \leq -2.65\}$ and $\{1.15 \leq x \leq 3\}$

(iii) Roots of $2x^2 + 3x - 6 = 1$

$f(x) = 1$

$x = -2.75$ and $x = 1.25$

(iv) Roots of $f(x) + 2 = 0$

$f(x) = -2$

$x = -2.35$ and $x = 0.85$

(v) Coordinates of minimum point

$(-0.75, -7.125)$

AINM NAME			
SCOIL SCHOOL		MÚINTEOIR TEACHER	
		ÁBHAR SUBJECT