Question Number	Scheme	Marks
4(a)	$b^2 - 4ac > 0 \quad p^2 - 4\times 3\times 4 > 0$ $\Rightarrow p^2 > 48 \Rightarrow$ critical values are $p = \pm\sqrt{48} \quad \left(= \pm 4\sqrt{3}\right)$ So set of values; $p < -4\sqrt{3}, p > 4\sqrt{3}$ (accept 3dp or better inc $\pm\sqrt{48}$)	M1 dM1A1 ddM1A1 (5)
(b)	$\pm 6, \pm 5, \pm 4, \pm 3, \pm 2, \pm 1, 0$	B1 (1) [6]

(a)
For the first **3** marks accept an equation or any inequality sign.
For the first **4** marks accept the use of x instead of p

M1 Use discriminant

dM1 Solve to find the CVs Depends on the first M mark.

A1 Correct CVs, exact or (min) 3 dp

dM1 Form 2 inequalities for the **outside** regions using their CVs
ie $p <$ smaller CV and $p >$ larger CV Depends on both previous M marks

A1 Correct set of values

(b)

B1 Answer as shown.