1. The equation $x^2 + (p-3)x - 3p = 0$ has two distinct real roots. Find the possible values of p. (8 marks)

Mark scheme:

$b^2 - 4ac$	(M1) Use of discriminant
$(p-3)^2 - 4(1)(-3p)$	(A1) Correct substitution into discriminant
$(p+3)^2$	(A1) Correct discriminant
$(p+3)^2 > 0$	(R1) Knowing the discriminant must be positive
Attempt to solve	(M1)
Correct working	(A1)
$k \in \mathbb{R}$ and $k \neq 2$	(A2) k is all reals except 2