

Term Test A version 2

(1) [5 points]

(2) [5 points]

(3) [5 points] The following points lie on a parabola $y = ax^2 + bx + c$: $P = (1, 4)$, $Q = (-3, 40)$, $R = (-2, 16)$. Determine the coefficients of the parabola.

(4) [5 points] Determine how many solutions the following system of equations has. Your answer should be none, one, or infinitely many. Show your work.

$$\begin{array}{rclcl} 2a & + & 3b & + & 7c & = & -1 \\ 4a & - & 2b & - & 2c & = & 3 \text{ otag} \\ 8a & - & 12b & - & 20c & = & 11 \end{array} \quad (1)$$