. 1. For what values of k, the equation $9x^2 + kx + 1 = 0$ has equal roots? 2. Find the roots of the equation $x^2 + 13x + 30 = 0$.

the character of the character is provided in 2 questions.

- Or

 For what value (s) of 'p' quadratic equation $px^2 + 6x + 9 = 0$ has no real roots?
- **2. 3.** If $x = -3\sqrt{2}$, is a solution of the quadratic equation $x^2 + kx 6 = 0$ find the value of k.
- **2.4.** Determine whether the quadratic equation $3x^2 + 2\sqrt{5}x 5 = 0$ has real roots or not. If yes, fithem.
 - Or

 For what value (s) of k, the quadratic equation $kx^2 + 6x + 1 = 0$ has real roots.