

In GeoGebra file, drag a , b , and c so as to match the following expression / equation

Equation	Calculate the value of $b^2 - 4ac$	Observe the value of d in CAS	Observe the graph – x-intercepts	Comment on the nature of roots of the equation
$x^2 + 8x - 3 = 0$				
$3x^2 + 5x + 1 = 0$				
$x^2 - 6x = 0$				
$2x^2 - 5x + 3 = 0$				
$-3x^2 - 6x - 3 = 0$				
$3x^2 + 6x + 3 = 0$				

For what values of k such that $x^2 - (k + 2)x + 4 = 0$ will have unequal real roots ?

For what values of k such that $(k + 1)x^2 + 3x + 4 = 0$ will not have real roots ?