Discriminant and Nature of Roots

Write the discriminant and nature of roots for each quadratic equation.

Q.No	Quadratic Equations	Discriminant	Nature of roots
1)	$3m^2 + 1 = 0$		
2)	$y^2 - 5y = 0$		
3)	$v^2 + 2v + 1 = 0$		
4)	$4x^2 - 6x = 0$		
5)	$2k^2 + 3k + 5 = 0$		
6)	$p^2 - 6p + 9 = 0$		
7)	$7n^2 - 2n - 1 = 0$		
8)	$5h^2 + h - 4 = 0$		

Discriminant and Nature of Roots

Answer key

Write the discriminant and nature of roots for each quadratic equation.

Q.No	Quadratic Equations	Discriminant	Nature of roots
1)	$3m^2 + 1 = 0$	**−12**	**The roots are unreal.**
2)	$y^2 − 5y = 0$	**−21**	**The roots are unreal.**
3)	$v^2 + 2v + 1 = 0$	**0**	**The roots are real and equal.**
4)	$4x^2 − 6x = 0$	**20**	**The roots are real and unequal.**
5)	$2k^2 + 3k + 5 = 0$	**−31**	**The roots are unreal.**
6)	$p^2 − 6p + 9 = 0$	**0**	**The roots are real and equal.**
7)	$7n^2 − 2n − 1 = 0$	**32**	**The roots are real and unequal.**
8)	$5h^2 + h − 4 = 0$	**81**	**The roots are real and unequal.**