

3) Looking closely at the discriminant of the equation and the solutions to the equation what links can you see between the discriminant and the number (or sort) of the solutions you get?

Why do you think this is?

4) Using the discriminant and your findings above, decide how many solutions each of these equations would have:

1.  $2x^2 + 8x + 2 = 0$

2.  $3x^2 - x + 10 = 0$

3.  $2x^2 + 4x + 2 = 0$