Source:

1 | eigenvalues

eigenvalue: multiplied by a scalar? a subspace that, when put through a linear map, only gets scaled.

$$Tv = \lambda v$$

T must be an operator!
where v is the eigenvector and λ is the eigenvalue. The equation is often rewritten as:

$$Tv - \lambda v = 0 Tv - \lambda Iv \quad = 0 (T - \lambda I)v = 0$$

now this can be factored and roots can be found

2 | depends on

2.1 | finding roots is helpful