3. Consider the following matrix A:

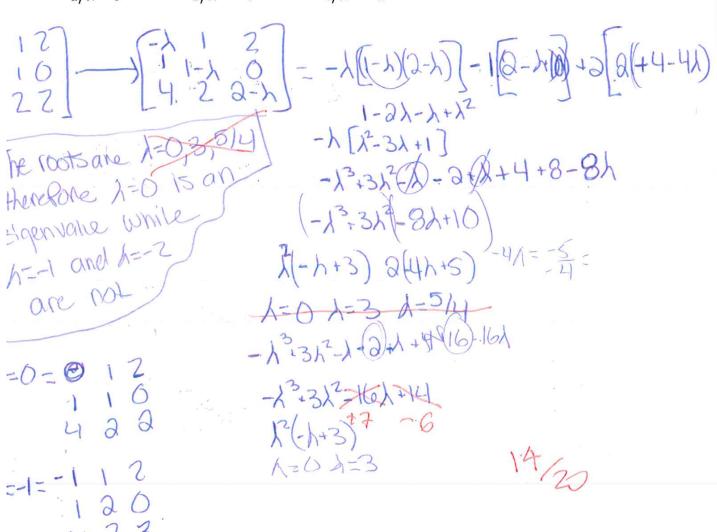
$$A = \begin{bmatrix} 0 & 1 & 2 \\ 1 & 1 & 0 \\ 4 & 2 & 2 \end{bmatrix}$$

For each value of λ given below determine if it is an eigenvalue of A.

a)
$$\lambda = 0$$

b)
$$\lambda = -1$$

c)
$$\lambda = -2$$



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