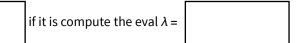
As always you need to show your work. Fill in the appropriate blanks

**1.** A pair  $(\lambda, \nu)$  is an eigen pair if

	and	
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- 2. For  $A = \begin{pmatrix} 2 & 1 & 1 \\ 2 & 1 & 1 \\ -2 & 1 & 1 \end{pmatrix}$ .
  - **2.1.** Is  $v = \{1, 1, -1\}$  an evec of A?



- 3. For  $A = \begin{pmatrix} 2 & 1 & 1 \\ 2 & 1 & 1 \\ -2 & 1 & 1 \end{pmatrix}$ .
  - **3.1.** Is  $v = \{0, 1, -1\}$  an an evec of A?

- **4.** For  $A = \begin{pmatrix} 4 & 2 \\ -2 & 5 \end{pmatrix}$ .
  - **4.1.** Is  $\lambda = 8$  an eval of A? if it is compute the evec v =

- **5.** For  $A = \begin{pmatrix} 4 & 2 \\ -2 & 5 \end{pmatrix}$ .
  - **5.1.** Is  $\lambda = 5$  an eval of A? if it is compute the evec v =