

REPETITION 19/10

$$A\vec{x} = \lambda\vec{x} \quad \text{for some } \vec{x} \neq \vec{0} \text{ and } \lambda$$

→ λ is an eigenvalue of A

→ \vec{x} is an eigenvector corresponding to λ

1) Find eigenvalues λ :

$$\det(A - \lambda I) = 0$$

characteristic equation

2) Find eigenvector \vec{x} corresponding to λ :

$$(A - \lambda I)\vec{x} = \vec{0}$$