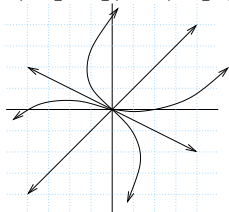
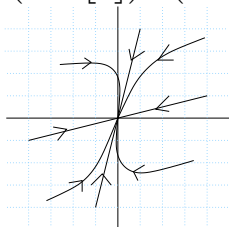


MATH 246: Chapter 3 Section 6: Graphs of Solutions Cheatsheet

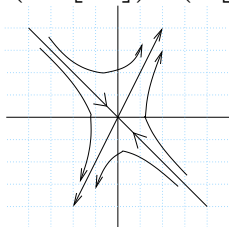
1. $A = \begin{bmatrix} 5 & 4 \\ 2 & 7 \end{bmatrix}$:
 $\left(3, \begin{bmatrix} -2 \\ 1 \end{bmatrix}\right), \left(9, \begin{bmatrix} 1 \\ 1 \end{bmatrix}\right)$



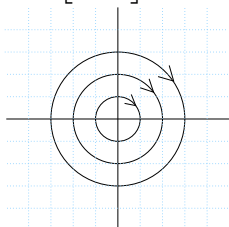
2. $A = \begin{bmatrix} -46 & 4 \\ -4 & -29 \end{bmatrix}$:
 $\left(-45, \begin{bmatrix} 4 \\ 1 \end{bmatrix}\right), \left(-30, \begin{bmatrix} 1 \\ 4 \end{bmatrix}\right)$



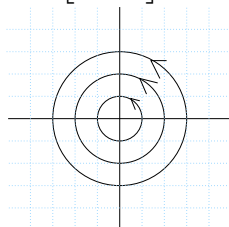
3. $A = \begin{bmatrix} -5 & 4 \\ 8 & -1 \end{bmatrix}$:
 $\left(-9, \begin{bmatrix} -1 \\ 1 \end{bmatrix}\right), \left(3, \begin{bmatrix} 1 \\ 2 \end{bmatrix}\right)$



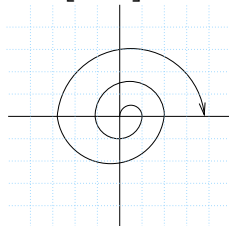
4. $A = \begin{bmatrix} -2 & 2 \\ -4 & 2 \end{bmatrix}$: $\lambda = 0 \pm 2i$



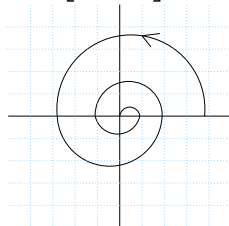
5. $A = \begin{bmatrix} 0 & -3 \\ 12 & 0 \end{bmatrix}$: $\lambda = 0 \pm 6i$



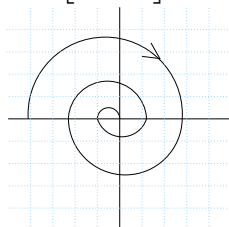
6. $A = \begin{bmatrix} 1 & 2 \\ -4 & 5 \end{bmatrix}$: $\lambda = 3 \pm 2i$



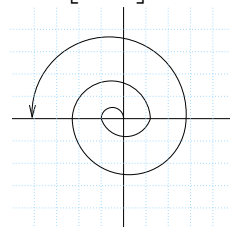
7. $A = \begin{bmatrix} -1 & -2 \\ 4 & -5 \end{bmatrix}$: $\lambda = -3 \pm 2i$



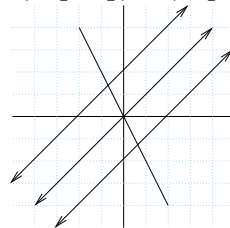
8. $A = \begin{bmatrix} -2 & 3 \\ -3 & -2 \end{bmatrix}$: $\lambda = -2 \pm 3i$



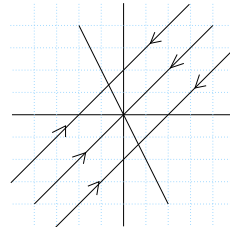
9. $A = \begin{bmatrix} 2 & -3 \\ 3 & 2 \end{bmatrix}$: $\lambda = 2 \pm 6i$



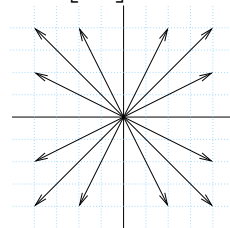
10. $A = \begin{bmatrix} 2 & 1 \\ 2 & 1 \end{bmatrix}$:
 $\left(0, \begin{bmatrix} -1 \\ 2 \end{bmatrix}\right), \left(3, \begin{bmatrix} 1 \\ 1 \end{bmatrix}\right)$



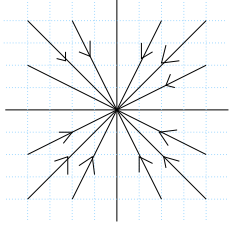
11. $A = \begin{bmatrix} -2 & -1 \\ -2 & -1 \end{bmatrix}$:
 $\left(0, \begin{bmatrix} -1 \\ 2 \end{bmatrix}\right), \left(-3, \begin{bmatrix} 1 \\ 1 \end{bmatrix}\right)$



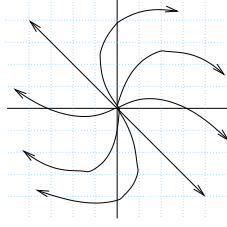
12. $A = \begin{bmatrix} 2 & 0 \\ 0 & 2 \end{bmatrix}$: $\lambda = 2$



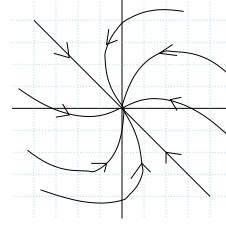
13. $A = \begin{bmatrix} -3 & 0 \\ 0 & -3 \end{bmatrix} : \lambda = -3$



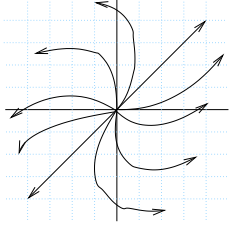
15. $A = \begin{bmatrix} 4 & 1 \\ -1 & 2 \end{bmatrix} : \left(3, \begin{bmatrix} -1 \\ 1 \end{bmatrix}\right)$



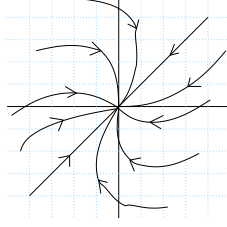
17. $A = \begin{bmatrix} -3 & -1 \\ 1 & -1 \end{bmatrix} : \left(-2, \begin{bmatrix} -1 \\ 1 \end{bmatrix}\right)$



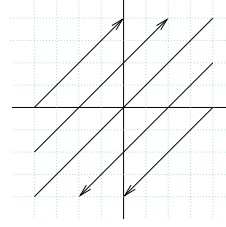
14. $A = \begin{bmatrix} 4 & -1 \\ 1 & 2 \end{bmatrix} : \left(3, \begin{bmatrix} 1 \\ 1 \end{bmatrix}\right)$



16. $A = \begin{bmatrix} -3 & 1 \\ -1 & -1 \end{bmatrix} : \left(-2, \begin{bmatrix} 1 \\ 1 \end{bmatrix}\right)$



18. $A = \begin{bmatrix} -1 & 1 \\ -1 & 1 \end{bmatrix} : \left(0, \begin{bmatrix} 1 \\ 1 \end{bmatrix}\right)$



19. $A = \begin{bmatrix} 1 & -1 \\ 1 & -1 \end{bmatrix} : \left(0, \begin{bmatrix} 1 \\ 1 \end{bmatrix}\right)$

