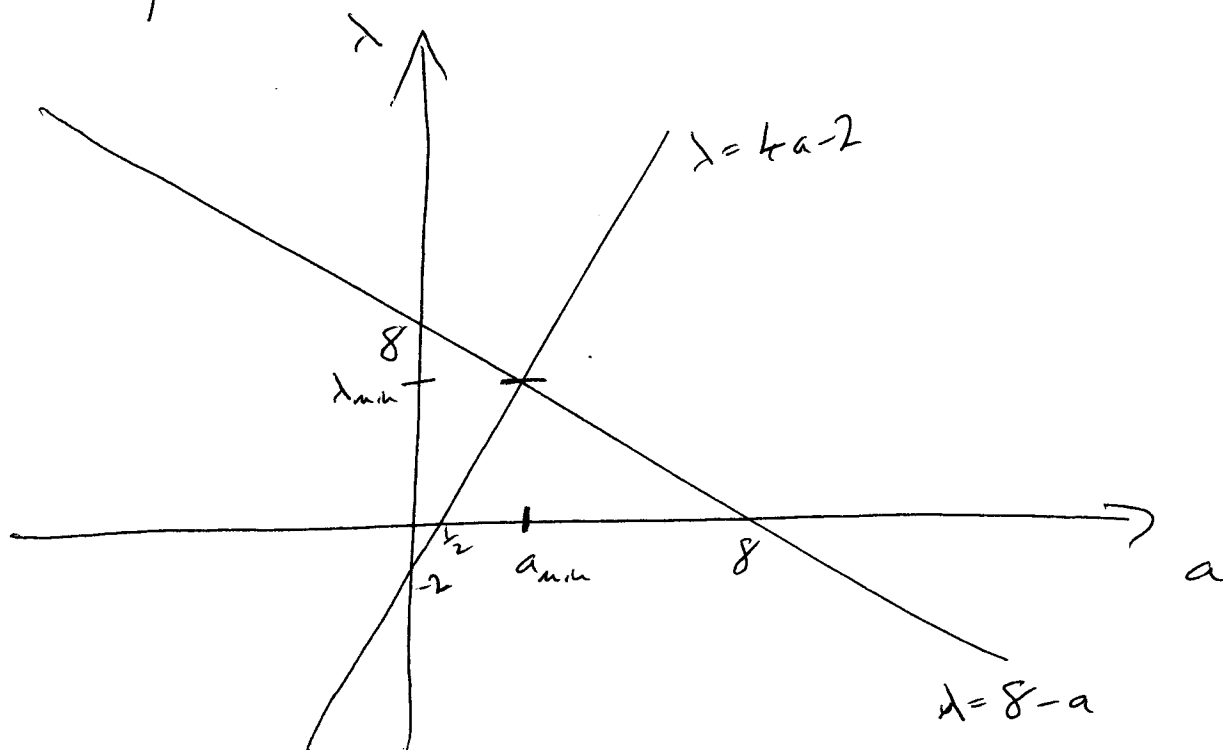


(c) (5 points) What value of a minimizes the largest eigenvalue of A ?

Eigenvalues are $8-a$ and $4a-2$



To minimize largest eigenvalue, need $8-a=4a-2$

That is, $5a=10$, or $\boxed{a=2}$.

Then ~~the~~ both eigenvalues are equal to 6.

$$8-2=6$$

$$4(2)-2=6$$