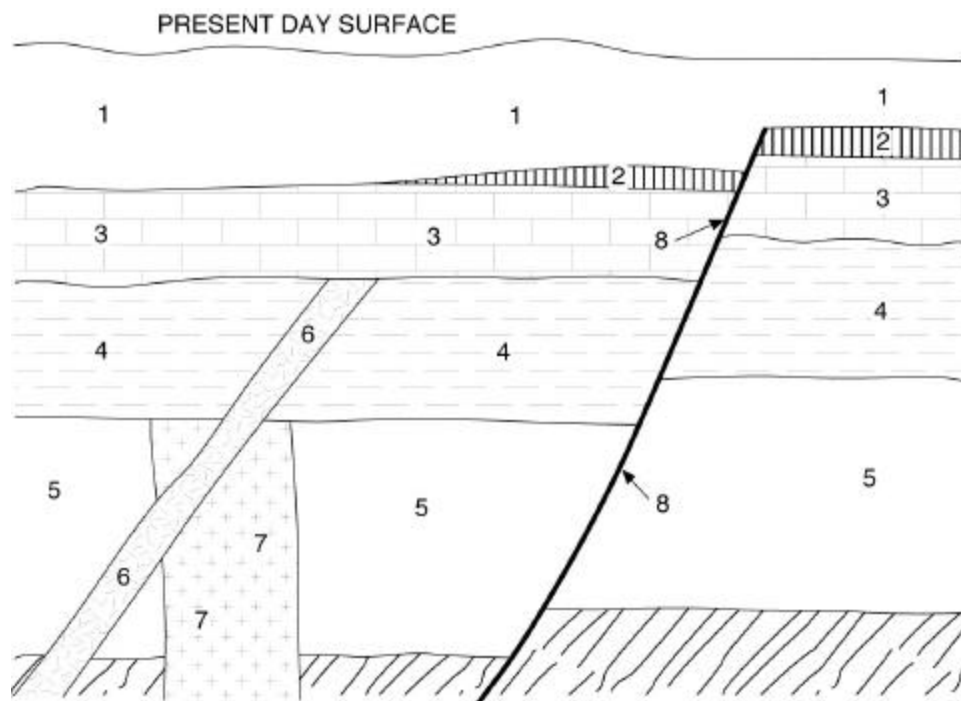


GEOLOGY 335 -- GEOLOGIC TIME INTERPRETATIONS

The following exercise provides a review of basic geologic principles involving relative and absolute geologic ages for a sequence of rock units. A dominantly sedimentary sequence of Phanerozoic age is illustrated on the diagram as a geologic cross-section. The same principles could be applied to a geologic map of the units if they had been deformed and exposed at the surface. The sedimentary sequence has been intruded by magmas during its history that have cooled to form igneous intrusions labeled 6 and 7; a basaltic lava flow is labeled 2. The ages for the emplacement of these igneous rocks have been determined using radiometric techniques to be those indicated on the table. The boundaries between the sedimentary units as shown represent erosional unconformities. A fault is labeled as feature 8.



Complete the following table concerning the geologic ages of the units shown on the cross section using a combination of information provided by radiometric dates, unconformities, and cross-cutting relationships. Use the geologic time scale in your course notes. Ma = million years before present.

UNIT	MINIMUM (YOUNGEST) AGE (Ma)	MAXIMUM (OLDEST) AGE (Ma)	GEOLOGIC AGE (RANGE) PERIOD NAME(S)
1	0		---
2	90	90	
3			---
4			---
5		570	
6	275	275	
7	520	520	
8			---