

# Directions for 101 Faults

 Strike and Dip of Bedding

 Strike and Dip of Fault Surface

The figures on the attached sheet are in map view, with North towards the top of the page.

Assume no major horizontal motion on the faults (that is, they are either Normal or Reverse faults).

1 - 4: Label upthrown and downthrown sides of the fault. Determine whether the fault is normal or reverse.

5 - 12: Label upthrown and downthrown sides of the fault. Determine whether the fault is normal or reverse.

Assuming that the area is simply folded ( i.e. antiforms are anticlines, etc.), determine whether the fold is an anticline or a syncline. Show direction of plunge with an arrow.

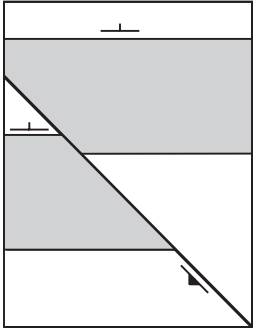
13. Draw a map showing an anticline and a syncline plunging to the East.

14. Draw a map showing an anticline plunging to the North which has been cut by a normal fault which runs N-S through the center of the fold and uplifts the East side.

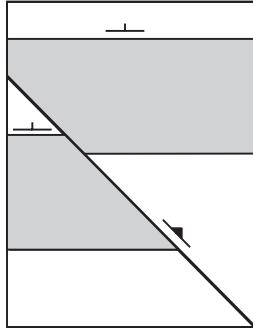
15. Draw a map showing a syncline plunging to the South which has been cut by a reverse fault which runs N-S through the center of the fold and uplifts the West side.

16. Draw a map showing a dome which has been cut by a fault which uplifted half of it. Label upthrown and downthrown sides, the dip of the fault surface and indicate whether normal or reverse.

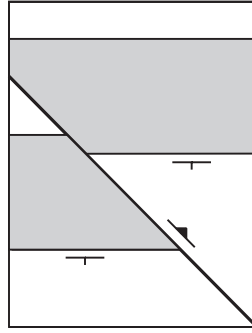
1



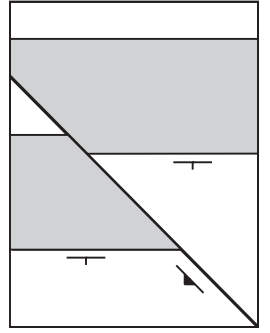
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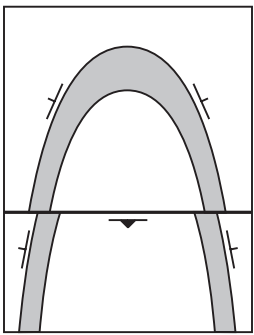
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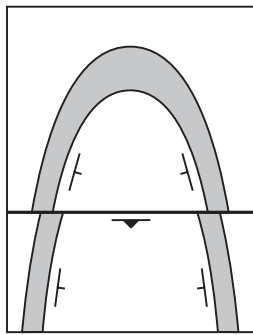
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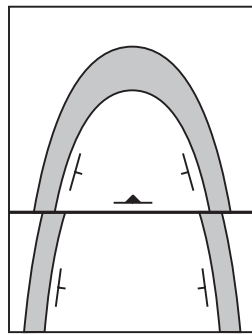
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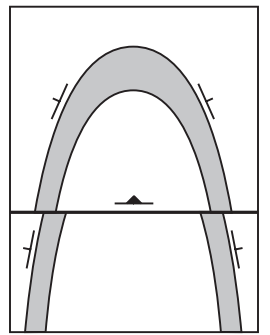
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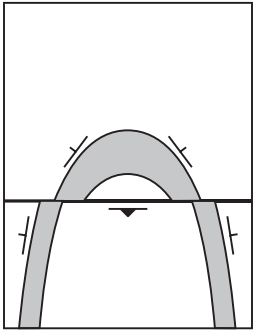
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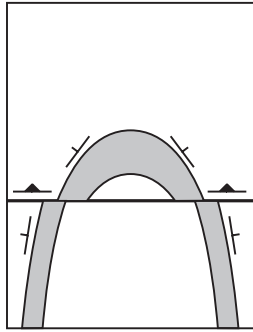
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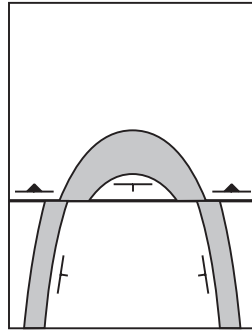
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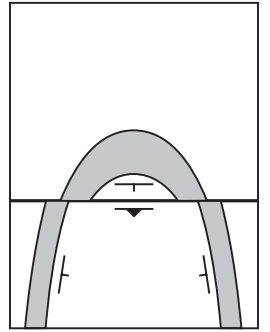
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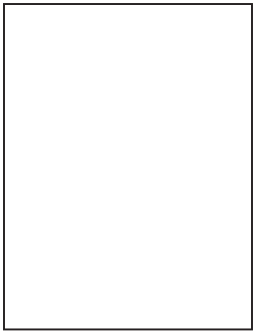
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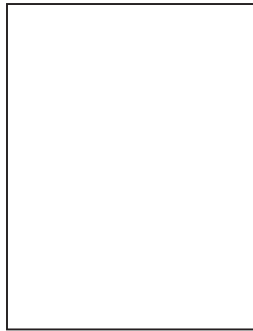
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13



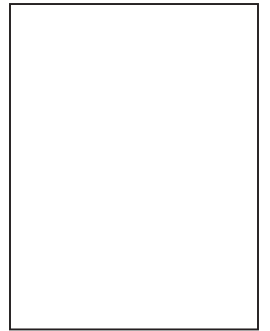
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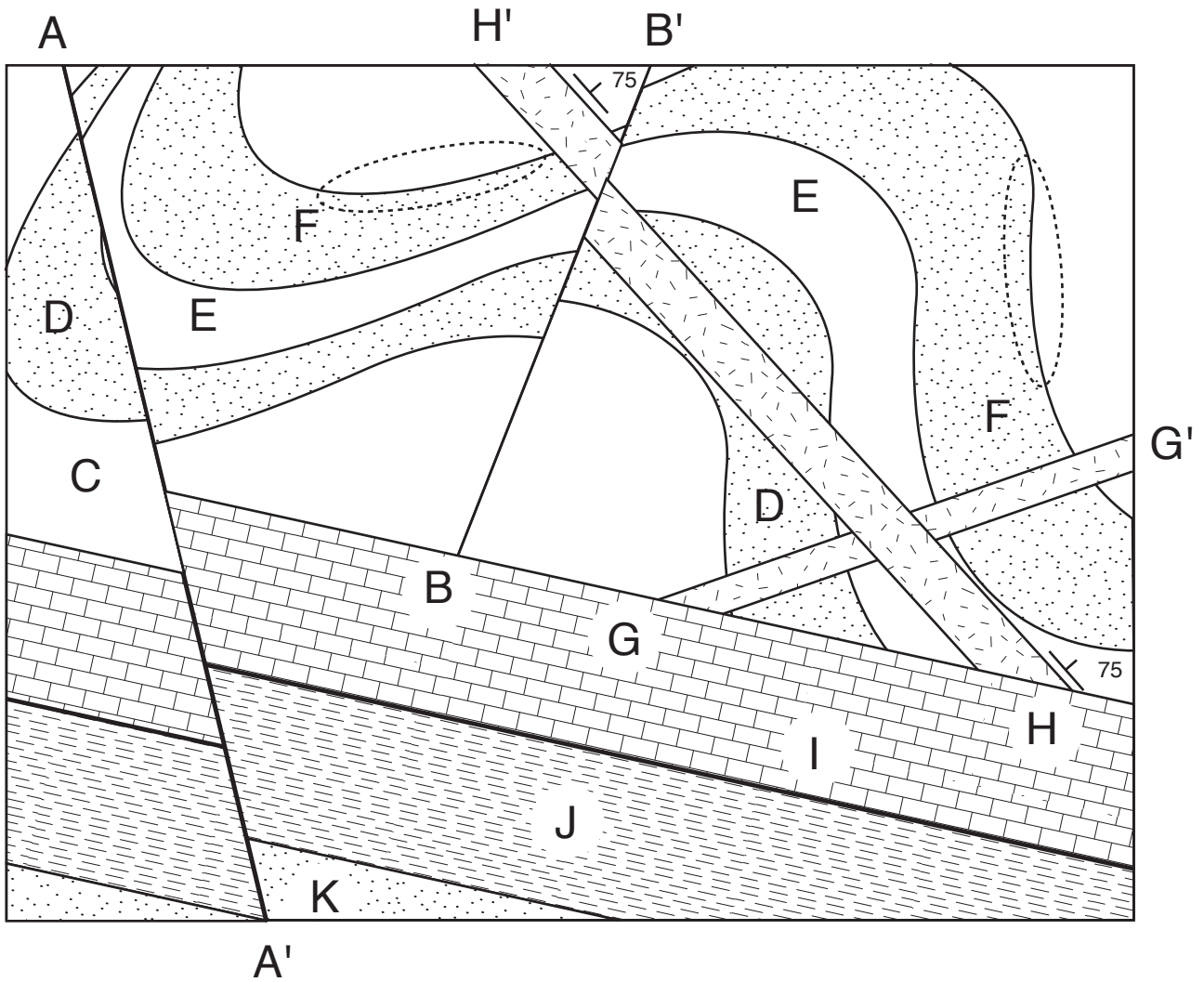


15



16





1. Put Strike and Dip symbols inside the dashed ellipses
2. Label Upthrown and Downthrown side of faults
3. Put an "S" in the nose of the synform(s) and an "A" in the nose of the antiform(s)
4. Carefully describe the geologic history of the mapped area, starting with the deposition of the oldest unit mapped. Be sure to include all erosion, uplift, subsidence, deformation and intrusion events at their proper place in the sequence.