

Go to the county map for Indiana at

[http://ftp2.census.gov/geo/maps/general\\_ref/stco\\_outline/cen2k\\_pgsz/stco\\_IN.pdf](http://ftp2.census.gov/geo/maps/general_ref/stco_outline/cen2k_pgsz/stco_IN.pdf)

and zoom in to answer these questions.

1. Name a county whose outline is not a polygon, telling how you know.
2. Name the polygon formed by the outline of Allen County.
3. Name the polygon formed by the outline of Cass County.
4. Name the polygon formed by the outline of Decatur County.
5. Name the polygon formed by the outline of Franklin County.
6. Name the polygon formed by the outline of Fulton County.
7. Name the polygon formed by the outline of Hancock County.
8. Name the polygon formed by the outline of Howard County.
9. Name the polygon formed by the outline of Miami County.
10. Name the polygon formed by the outline of Ripley County.
11. Name the polygon formed by the outline of Wells County.
12. Name the polygon formed by the outline of Whitley County.
13. If Lake County's northern and southern borders were straight, what kind of polygon would the outline be?
14. Is the outline of Adams County convex or concave?
15. Is the outline of Fulton County convex or concave?
16. Is the outline of Vanderburgh County convex or concave?
17. How many diagonals does Fayette County's outline have?
18. How many diagonals does Franklin County's outline have?
19. Find a county whose outline appears to be regular.
20. Find a county whose outline appears to be equiangular but not equilateral.

1. Any county that has a curved portion to its border will do. The curve prevents the shape from being a polygon.
2. hexagon
3. octagon
4. heptagon
5. pentagon
6. decagon
7. dodecagon
8. decagon
9. hexagon
10. heptagon
11. hexagon
12. decagon
13. It would be a quadrilateral.
14. convex
15. concave
16. concave
17. 9 diagonals
18. 5 diagonals
19. Hamilton, Orange, and Elkhart Counties (Delaware, Randolph, and Union are very close)
20. Any of the rectangular counties other than the squares above will do.