



**1. Figure It Out** — Using arithmetic is an important part of a natural resource manager's job. See if you can solve the following problems that might face some DNR employees or others working with the natural environment.

- When 10 to 15 eggs have been laid in a wood duck's nest, the clutch is usually complete. If a biologist found 6 nests with 11 eggs in each, how many total eggs were laid?
- If a predator completely destroyed 2 of the nests but did not touch the other 4, how many total eggs would be left?
- Of the 4 nests of eggs that remain, if only half of the eggs ever hatch, how many newly born wood ducks would there be?
- If predators kill half of those wood ducks, how many would survive?
- Before a timber sale, a forester goes into the woods and tallies (counts) the number of trees to be cut, identifies them and calculates the volume of wood in each tree. A forester has tallied a woods and marked for harvest 6 cherry, 8 black walnut, 12 ash, 7 maple, 9 beech and 10 white oak. How many trees were marked in all?
- If the landowner decides not to cut the maple trees, how many trees would be left to harvest?
- A "vener" tree is one of very high quality. If one-half of the white oaks marked and one-fourth of the black walnuts marked were veneer trees, how many veneer trees were marked in all?
- If a farmer plants 30 acres of oats, 50 acres of soybeans and 70 acres of corn, how many total acres were planted?
- If 10 percent of the soybeans are washed out in a flood, how many acres of soybeans are lost?
- If the farmer's corn averages 100 bushels of corn per acre, how many total bushels of corn will be harvested?

**2. Name the missing counties**

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

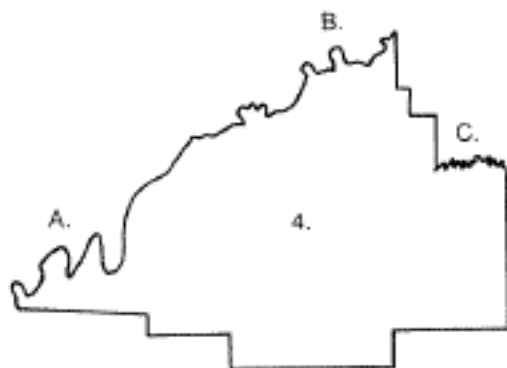
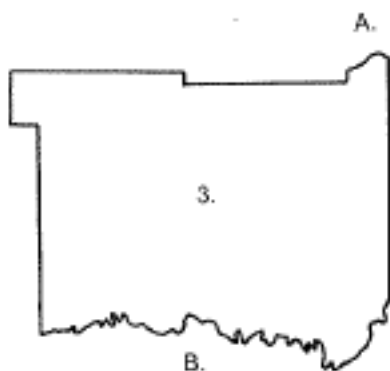
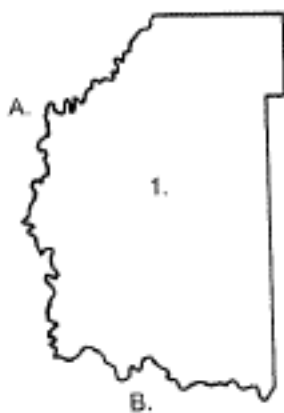


**3. What Am I?**



\_\_\_\_\_

4. **Down By The River** — Many of Indiana's 92 counties are bordered by rivers, giving them at least one boundary with an irregular shape. All of the counties shown below are bordered by at least two different rivers. Can you name the counties and the rivers that border them?



- 1. 1. 66
- 2. 44
- 3. 22
- 4. 11
- 5. 52
- 8. 45
- 7. 7
- 8. 100
- 9. 5
- 10. 7,000

- 2. 1. Jasper
- 2. Delaware
- 3. Putnam
- 4. Jennings
- 5. Pike
- 3. Chippewack

- 4. 1. Daviess
  - a. West Fork White River
  - b. East Fork White River
- 2. Posey
  - a. Wabash River
  - b. Ohio River
- 3. Jackson
  - a. East Fork White River
  - b. Muscatatuck River

- 4. Gibson
  - a. Wabash River
  - b. White River
  - c. Patoka River
- 5. Perry
  - a. Anderson River
  - b. Ohio River