

9. [7 points] In the United States, the number of werewolves, W , living in a given state is a function $W = g(V)$ of the number of vampires, V , that live in that state. The formula for $g(V)$ is $g(V) = kV^{2/3}$, where k is a positive constant. The constant k does not depend on the state.
- a. [4 points] In Pennsylvania, there are 1728 vampires and 720 werewolves. In Indiana, there are 512 vampires. How many werewolves live in Indiana?

Answer: _____

- b. [3 points] There are 50% more vampires in Ohio than there are in Michigan. How much larger is the werewolf population of Ohio than that of Michigan?
Your answer should be accurate to at least 0.01%.

Answer: The werewolf population of Ohio is _____ percent larger than the werewolf population of Michigan.