

**Working with  
Polynomials of Higher Degree**

Name \_\_\_\_\_

A medical research lab is testing a new drug on a patient. The amount of the drug remaining in the patient's bloodstream  $t$  hours after the drug is administered can be modeled by the equation

$$P(t) = -2t^3 + 6t^2 - 8t + 8$$



Using a graph, find out how many hours after administration will the drug be totally eliminated from the patient's bloodstream?

Be sure to include:

- a graph, with axes labeled and titled.
- a written explanation of how you interpreted the graph to answer the question.
- the answer in hours.

