## **Lesson Performance Task #2**

Section 3.3 Pg. 114

Show your work on this page or an attached page.

Jenna's parents have given her an interest-free loan of \$100 to buy a new pair of running shoes. She plans to pay back the loan with monthly payments of \$20 each.

- a. Write a function rule for the balance function B(p), where p represents the number of payments that Jenna has made.
- b. After how many payments will Jenna have paid back more than half the loan? Explain you reasoning.
- c. Suppose the loan amount were \$120 and the monthly payments were \$15. Write a rule for the new balance function and use it to determine how long it would take Jenna to pay off the loan.