## Complete each of the following problems and graph the given data. Once your graph is complete, answer the corresponding questions.

1. Arianna opened a savings account after her sweet sixteen birthday party, with plans of using the money to purchase her first car. For her birthday she was given $\$ 750$ in gifts. After 10 months she has $\$ 2,750$. Use graph on back.

Part A What is the function rule that represents Arianna's savings account?
Part B What does the slope represent?
Part C What does the y - intercept represent?
Part D Arianna is saving money to purchase a motorcycle that costs $\$ 4,350$. How many months will it take her to save enough money? Show your work and mark your answer on the graph.
2. Jane and Fred each have separate savings accounts. At the beginning of the year, Jane's account had \$475 and Fred's account had \$350. After nine months (August) Jane's account has \$700 and Fred's account has \$800. Use graph on back.

Part A Jane's function rule: $\qquad$ Fred's function rule: $\qquad$
Part B Who added more money per month?
Part C During what month did both Jane and Fred have the same amount of money in their accounts? Explain how you found your answer.
3. Bryan won $\$ 40,000$ through the lottery and decided to take some time off from work. After four months he had $\$ 30,000$. Use graph on back.

Part A What is the function rule?
Part B What does the slope represent?
Part C What does the y - intercept represent?
Part D Predict how long Bryan can stay out of work based on the amount of money he spent the first four months. Explain how you found your answer.
1.

2.

3.


