Lesson 2.3 ~ Explore!   Saving and Spending

Name_____ Period_____ Date_____

William and his sister, Jennifer, each worked summer jobs. William mowed lawns in his neighborhood. Jennifer baby-sat for two different families. By the end of the summer, William had put $410 in a savings account. Jennifer put $275 in her account. After school started, Jennifer continued baby-sitting and earned $20 per week. She put all of her earnings in her savings account. William stopped working and withdrew $15 per week from his savings account for spending money.

Step 1: Write a recursive routine (start value and operation) for the amount in William's savings account each week after school begins.

Step 2: Write a recursive routine for the amount in Jennifer's savings account each week after school begins.

Step 3: Fill in the input-output tables shown below for the first 10 weeks after school starts.

Weeks After School Starts	William's Total Savings
0	
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

Weeks After School Starts	Jennifer's Total Savings
0	
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

Step 4: On the SAME first-quadrant coordinate plane, graph William and Jennifer's total savings for the first ten weeks. Use ● to designate Jennifer's amounts and ▲ to represent William's amounts. Put weeks on the *x*-axis and total savings in dollars on the *y*-axis.
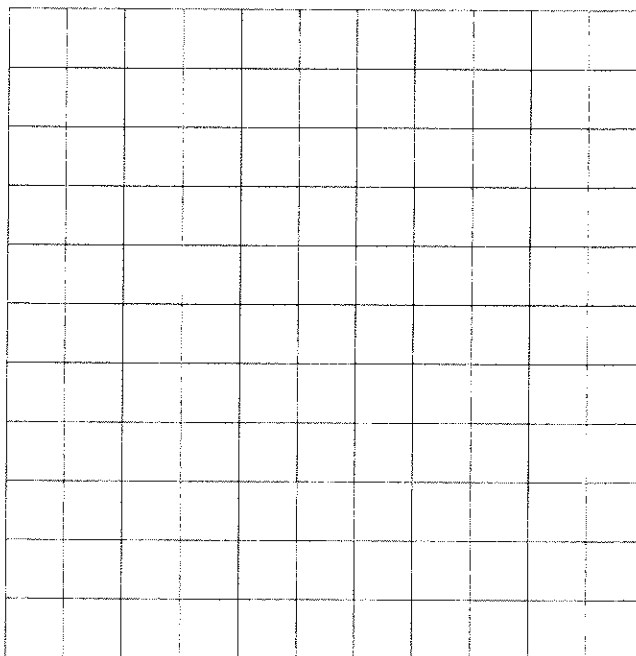
Step 5: After what week does Jennifer have more money than her brother? Which illustration (table, graph or recursive routine) best shows this?