

Name \_\_\_\_\_

Date \_\_\_\_\_

## Unit 5 Function Project The Best Way to Get Paid

### Here's the Situation

You are hoping to be hired for 10 days of work this summer with Sir-Lines-a-lot to add 100 new spots to the parking lot. Hard working students will be invited to work any number of days they choose up to 10 days. You will be offered three payment plans. You must choose which plan is best for you depending on how many days you can work.

### Plan A - \$30 per day

- Construct a table that shows the amount of money earned each day for 10 days under this payment plan. (The second column should all be 30's. Why?)
- Add a third column to the table that shows the **cumulative** total earned after each day.
- Construct a graph that shows the *Day #* on the x axis and the ***Cumulative Total*** on the y axis.
- Label the type of function that corresponds to the table and graph

### Plan B - \$6 on Day 1, \$12 on Day 2, \$18 on Day 3, and so on. Each day the student earns \$6 more than the previous day.

- Construct a table that shows the amount of money earned each day for 10 days under this payment plan.
- Add a third column to the table that shows the **cumulative** total earned after each day.
- Construct a graph that shows the *Day #* on the x axis and the ***Cumulative Total*** on the y axis.
- Label the type of function that corresponds to the table and graph.

**Plan C - \$1 on Day 1, \$2 on Day 2, \$4 on Day 3, and so on. Each day the student earns twice as much as the previous day.**

- Construct a table that shows the amount of money earned each day for 10 days under this payment plan.
- Add a third column to the table that shows the **cumulative** total earned after each day.
- Construct a graph that shows the *Day #* on the x axis and the ***Cumulative Total*** on the y axis.
- Label the type of function that corresponds to the table and graph.

Questions for Understanding

Which Plan would you choose if you could only work five days?

Which Plan would you choose if you could only work seven days?

Which Plan would you choose if you could work all ten days?