## Unit 2 Linear Functions Day 1 – 6 Review Worksheet #1

Name: \_\_\_\_\_ Hour: \_\_\_\_

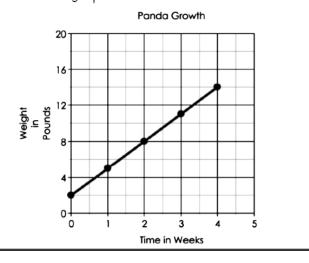
Read each situation, then answer the questions by analyzing and comparing the different linear situations.

1. The Metropolis Zoo recently celebrated the birth of two new baby pandas!

**Mochi** the panda cub has been measured and weighed each week since she was born.

| Weeks | Weight |
|-------|--------|
| 0     | 1      |
| 1     | 5      |
| 2     | 9      |
| 3     | 13     |

Mochi's brother is **Kappa**. His weight has been charted on the graph below.



- Which panda was heavier when they were born?
- Which panda is growing faster?
- Which panda will weigh more at five weeks?
- 2. Two contestants on Biggest Loser are Valerie and Oscar. Their weight loss progress is shown below.

Valerie's weight loss is shown by this function, where W is her weight in pounds and t is the time in weeks.

$$W = 235 - 2.5t$$

Oscar's weight loss is tracked in the table below.

| Weeks  | 0   | 2   | 5   | 6   |
|--------|-----|-----|-----|-----|
| Weight | 247 | 243 | 237 | 235 |

- Who weighed more at the beginning of the show?
- Who is losing weight faster?

-Jessica Wilkerson 2013-

3. Mr. Rich recently planted a crop of money trees in his garden.

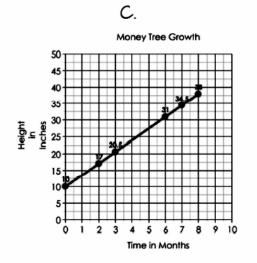
A

The first tree was five inches tall when planted. It has grown four inches every month since being planted.

B.

Measurements were taken of the second tree and given below:

| Months | 0 | 2  | 3    | 5    |
|--------|---|----|------|------|
| Height | 3 | 12 | 16.5 | 25.5 |



- Which of the trees is growing the fastest?
- Which tree was the tallest when it was first planted?
- Challenge: Which tree is the tallest after 6 months?

4. Tony is the best pizza deliveryman in the city. He has been offered jobs by all the best pizza places.

**Bombinoes' Pizza** is offering \$56 per shift and \$2.50 in commission for each pizza delivered.

Little Squeezer's showed Tony a table of salaries.

| Pizzas | 0  | 2  | 4  | 10 |
|--------|----|----|----|----|
| Salary | 48 | 54 | 60 | 78 |

**Pizza Tent** has given Tony his pay options in the following function. Srepresents Tony's salary, and prepresents the number of pizzas he delivers.

$$S = 2.75p + 52$$

- Which company pays the best pay per shift?
- Which company pays the most per pizza?
- Challenge: If Tony is going to deliver at least 20 pizzas every night, which company should he work for?

