NAME: $\qquad$
The minnesota State fair


Below is a chart of the attendance at the Minnesota State Fair in 2004, 2005, and 2006.

| Year | Attendance |
| :---: | :---: |
| 2004 | $1,741,825$ |
| 2005 | $1,631,940$ |
| 2006 | $1,530,127$ |

1. Look at the chart's data. Predict what the fair's attendance will be in 2007 and 2008.

2007: $\qquad$
2008: $\qquad$
2. What helped you make your prediction?
$\qquad$
$\qquad$
$\qquad$
3. What do you notice about the Minnesota State Fair's attendance as the years go on? Use math words in your answer.
$\qquad$
$\qquad$
$\qquad$
4. Describe what the mean is. Use math words in your answer.
5. Look at the attendance for 2004,2005 , and 2006. Estimate what the mean attendance for 2004, 2005, and 2006 might be. Explain why your estimate makes sense.

Estimate: $\qquad$
Explanation:
$\qquad$
$\qquad$
$\qquad$
$\qquad$
6. Now look at the attendance for 2004, 2005, 2006 AND your predicted attendance for 2007 and 2008. Estimate what the mean attendance for 2004 - 2008 might be. Is this new mean attendance more or less than your estimate in \#5? Why?

New Estimate: $\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$


Name: $\qquad$

## ICE CREAM DESIGN

An ice cream stand at a state fair lets you design your own ice cream sundae.


## Toppings:

| Chocolate Syrup | Caramel | Chocolate Chips | Mixed Fruit |
| :--- | :--- | :--- | :--- |
| Sprinkles | Whipped Cream | Candy | Nuts |

Design two different ice cream sundaes for Freddy, a young boy who loves the fair. Keep these in mind as you design the sundaes:

- Freddy's mother will allow at most three topping on each sundae
- Freddy does not like mixed fruit on his sundae
- Freddy does not like chocolate syrup and caramel mixed on his sundae
- Freddy must have chocolate chips on one sundae
- Freddy must have whipped cream on both sundaes

Make up a name for each sundae you create. Fill in the chart below.

| Sundae Name | Toppings |
| :---: | :---: |
|  |  |
|  |  |
|  |  |
|  |  |

Name: $\qquad$

## Beverage Pricing at the Fair

Below is a chart of some drinks that will be sold at this year's Minnesota State Fair. The fair's manager has not yet figured out the 2007 prices for each item.

| Drink | Suggested <br> Price |  |
| :--- | :--- | :--- |
| Bottled Water |  |  |
| Soda |  |  |
| Hot Cocoa |  |  |
| Apple Cider |  |  |
| Coffee |  |  |

The manager wants your help to figure out the prices. Here is some information from last year's fair that will help you.

- The soda must be cheaper than the apple cider and hot cocoa.
- About 500,000 bottles of water were sold at the fair last year.
- At least $\$ 500,000$ worth of bottled water should be sold.
- Last year, the apple cider was $\$ 3.50$ a cup. A survey showed that people thought this was too expensive.
- The hot cocoa was $\$ 3.00$ a cup last year. It needs to be increased by $\$ .25$ this year.
- The coffee price should be between $\$ 1.20$ and $\$ 1.90$.

Use this information to fill in the suggested prices and your reasons for each in the chart above.

$$
6,543,671+2,345=
$$

Make up a story problem about the number sentence above. In what kinds of situations might you see really big numbers like this?

Story Problem:

$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

