

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



## The Big E



Below is a chart of the attendance at the Big E in 2006, 2007, and 2008.

Year	Attendance
2006	1,741,825
2007	1,631,940
2008	1,530,127

1. Look at the chart's data. **Predict** what the fair's attendance will be in 2009 and 2010.

2009: \_\_\_\_\_

2010: \_\_\_\_\_

### CHECKPOINT



2. What strategies helped you make your prediction?

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3. What do you notice about the Big E's attendance as the years go on? Use math language in your answer.

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4. Describe what the **mean** is. Use math language in your answer.

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5. Look at the attendance for 2006, 2007, and 2008. **Estimate** what the **mean attendance** for 2006, 2007, and 2008 might be. Explain why your estimate makes sense.

Estimate: \_\_\_\_\_

Explanation:

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CHECKPOINT



6. Now look at the attendance for 2006, 2007, 2008 AND your predicted attendance for 2009 and 2010. **Estimate** what the **mean attendance** for 2006 – 2010 might be. Is this new mean attendance **more or less** than your estimate in #5? Why?

New Estimate: \_\_\_\_\_

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

## 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: \_\_\_\_\_

## 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 Price	Reasons
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:

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