

Name \_\_\_\_\_

## The cost of a Super Bowl XLVI ad

The average price of a Super Bowl commercial in 2011 was approximately 3 million U.S dollars for a 30 second slot. Now in 2012, ads are selling for a record **\$3.5 million for 30 seconds** of ad time.

1. Volkswagen is going to have a 60 second ad this year. How much will that ad cost?
2. With the chart below we can make some interesting observations. The numbers get really big. So, please write your answers in both standard notation and scientific notation.

| Commercial length in seconds | Length of commercial in minutes | Cost written in standard form | Cost written in scientific notation |
|------------------------------|---------------------------------|-------------------------------|-------------------------------------|
| 30                           |                                 | \$ 3,500,000                  | $\$ 3.5 \bullet 10^6$               |
| 60                           |                                 |                               |                                     |
| 90                           |                                 |                               |                                     |
| 120                          |                                 |                               |                                     |
| 150                          |                                 |                               |                                     |
| 180                          |                                 |                               |                                     |
| 210                          |                                 |                               |                                     |

3. This year Pepsi will have two 30-second commercials. How much money will they spend? Write your answer in **scientific notation**.
4. How much would a 15-second commercial cost this year? (In both standard and scientific notation)
5. How much would a 10-second commercial cost this year? (In both standard and scientific notation)
6. How much would a 1-second commercial cost this year? (In both standard and scientific notation)
7. What might a 1-second commercial be like?
8. If 10 commercials cost  $\$3.5 \bullet 10^7$  and 100 commercials cost  $\$3.5 \bullet 10^8$ , how much would **110** commercials cost? Write your answer in **scientific notation**.
9. During the entire Super Bowl game (It lasts about 4 hours), about how many minutes do you think will be filled with commercials?

10. How much would it cost (in scientific notation) to buy all of that commercial time?

11. As a test of how effective these ads were, name **four** of the commercials that you saw along with a brief description of the ad.

| <u>Company</u> | <u>Brief Description</u> |
|----------------|--------------------------|
| _____          | _____<br>_____<br>_____  |
| _____          | _____<br>_____<br>_____  |
| _____          | _____<br>_____<br>_____  |
| _____          | _____<br>_____<br>_____  |

After you have watched the Super Bowl, answer the following questions about your favorite commercial.

12. Describe your favorite commercial and why you liked it?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

13. Who do you think the commercial was marketed towards? (For example: Children, teenagers, young adults, working class people, retired adults, mothers, etc.) Why?

Matt Timmins who is a Newton Public Schools teacher originally contributed this activity.

Sources:

- <http://www.usatoday.com/money/advertising/story/2011-09-06/Super-Bowl-ads-almost-sold-out-Only-5-slots-remain/50266272/1>
- <http://www.usatoday.com/money/advertising/story/2012-01-02/super-bowl-ads-sell-out/52342052/1>
- <http://kelloggsuperbowlreview.wordpress.com/>