Interpreting Broken-Line Graphs (A)

Answer the questions about the broken-line graph.

Historical Gold Prices 1993 to 2012

Source of data: http://onlygold.com/tutorialpages/prices200yrsfs.htm

In what years did gold decrease in value?

In what year do you think the price of gold will reach $2000 per ounce?

In what 3 years did gold increase the most?

What was the approximate price of gold from 1997 to 1999?

If someone bought $20,000 worth of gold in 1993, how much would that gold be worth in 2011?
In what years did gold decrease in value?

In what year do you think the price of gold will reach $2000 per ounce?
Based on the graph, in the next 5 years. In reality this might be completely different.

In what 3 years did gold increase the most?
2007, 2009, 2010

What was the approximate price of gold from 1997 to 1999?
Actual was $287.05, $288.70, and $290.25. Students will probably estimate around $300.

If someone bought $20,000 worth of gold in 1993, how much would that gold be worth in 2011?
$20000 would have bought about 50 ounces of gold in 1993. 50 x 1531 = $76550 in 2011.
Interpreting Broken-Line Graphs (B)

Answer the questions about the broken-line graph.

Estimated World Population 1900 to 2000 by Decade


Estimate the population of the world in 1970 based on this graph.

In what decade did the population increase the least?

In what decade did the population increase the most?

Estimate what the population will be in 2020 and extend the graph.

In what years did the population reach 2, 3, 4, 5, and 6 billion people?

What are some effects of a growing world population?
Estimate the population of the world in 1970 based on this graph.

3.7 billion

In what decade did the population increase the least?

1900's

In what decade did the population increase the most?

1980's

Estimate what the population will be in 2020 and extend the graph.

Answers will vary.

In what years did the population reach 2, 3, 4, 5, and 6 billion people?


What are some effects of a growing world population?

Answers will vary.

Interpreting Broken-Line Graphs (C)

Answer the questions about the broken-line graph.

Average U.S. Precipitation from 2000 to 2012

What three years had the least precipitation?

What three years had the most precipitation?

Which years do you think were better for farmers? Why?

Draw a straight horizontal line that shows the mean rain fall for all years from 2000 to 2012.

Can you predict the amount of rainfall from year to year based on this graph?

Source of data: http://www.ncdc.noaa.gov/cag/time-series/us
Interpreting Broken-Line Graphs (C) Answers

Answer the questions about the broken-line graph.

Average U.S. Precipitation from 2000 to 2012

What three years had the least precipitation?

What three years had the most precipitation?
2004, 2009, 2010 (2008 is a very close 4th)

Which years do you think were better for farmers? Why?
Years with more precip. Might argue that flooding risk means average precip. is better.

Draw a straight horizontal line that shows the mean rain fall for all years from 2000 to 2012.
Shown on graph. Actual mean is 29.6 inches.

Can you predict the amount of rainfall from year to year based on this graph? Justify your answer.
Answers will vary, but the most likely answer is no. Justification is probably more important.

Source of data: [http://www.ncdc.noaa.gov/cag/time-series/us](http://www.ncdc.noaa.gov/cag/time-series/us)
When was John the most popular name?

Based on the graph, will John increase or decrease in popularity in the future?

How many Johns were there per 1 million people in 2002 and 2011?

What might have caused the increase in popularity of the name John in 2004 and 2005?

Why do you think the name John decreased in popularity in the 2000's?
When was John the most popular name?

2002

Based on the graph, will John increase or decrease in popularity in the future? Justify your answer.

Students will probably justify a decrease since the trend in this graph is downward.

How many Johns were there per 1 million people in 2002 and 2011?

Note graph shows per 1000, so 12790 in 2002 and 8160 in 2011.

What might have caused the increase in popularity of the name John in 2004 and 2005?

May have been a celebrity with that name.

Why do you think the name John decreased in popularity in the 2000's?

Greater cultural diversity, more naming options, trend toward exotic names, etc.
Interpreting Broken-Line Graphs (E)

Answer the questions about the broken-line graph.

What was the relative popularity of math worksheets in September?

What months were math worksheets most popular? Why?

Why weren't math worksheets as popular in the summer months?

Between what two months was the greatest jump in popularity?

In which two months was the relative popularity 64?

Do you think you can use this graph to predict graphs for future years?

Source of data: [http://www.google.ca/trends/](http://www.google.ca/trends/)
What was the relative popularity of math worksheets in September? 
76

What months were math worksheets most popular? Why?
January, February. After first report card looking for extra practice. New term at school, etc.

Why weren't math worksheets as popular in the summer months?
School break.

Between what two months was the greatest jump in popularity?
August and September

In which two months was the relative popularity 64?
May and November

Do you think you can use this graph to predict graphs for future years?
Students may say yes because it seems to follow a pattern based on the school schedule.