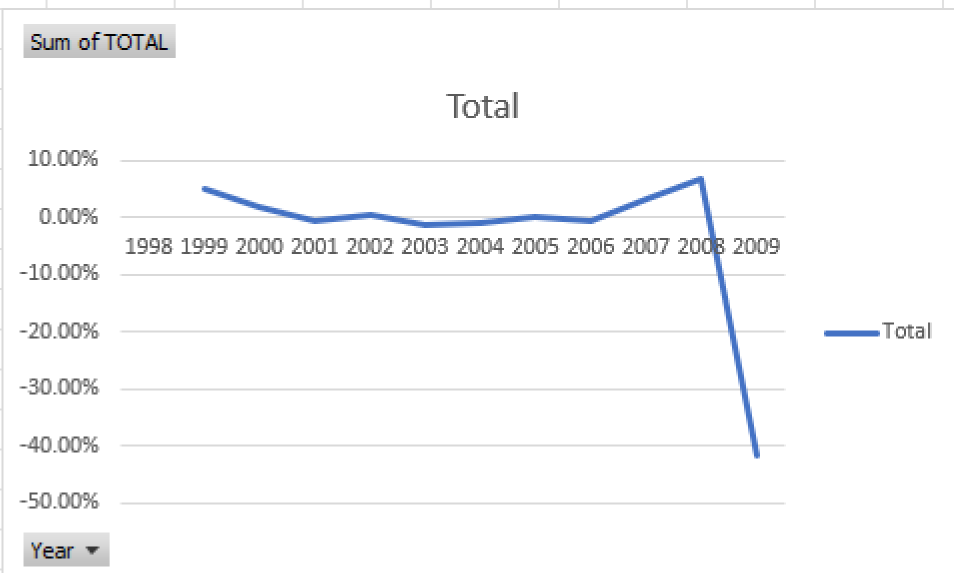
1)

Percentage Change in Hobby, toy, and game stores business over time (per year)

Pivot Table:

Row Labels	Sum of TOTAL
1998	
1999	5.15%
2000	1.74%
2001	-0.75%
2002	0.56%
2003	-1.41%
2004	-1.10%
2005	-0.02%
2006	-0.75%
2007	3.45%
2008	6.67%
2009	-41.55%
Grand Total	

Pivot Chart:



These percentages reflect the year-over-year change in the business performance of Hobby, Toy, and Game stores. Here's a summary of the trends:

1999 to 2000: Positive growth, with a peak in 1999 at 5.15%, then slowing down to 1.74% in 2000.

2001 to 2006: A period of overall decline with some fluctuations, including a slight positive growth in 2002, followed by negative growth from 2003 to 2006.

2007 to 2008: Recovery years with notable positive growth, peaking at 6.67% in 2008.

2009: A sharp decline of -41.55%, likely due to the impact of the Great Recession.

This analysis highlights significant fluctuations in the business, with a sharp decline in 2009 corresponding to the global financial crisis.

2)

Yearly Growth Trend:

1998 to 2002: There is a generally positive trend, with modest growth except for 2001, where there is a small decline of -0.75%.

2003 to 2006: The trend is mostly negative, with slight declines each year, indicating a struggle or slowdown in the business during this period.

2007 to 2008: A significant recovery occurs, with growth rates of 3.45% in 2007 and 6.67% in 2008.

2009: There is a dramatic decline of -41.55%, indicating a severe downturn in the business.

Explanation:

2003 to 2006 Decline: The slight negative growth during these years could indicate a period of market saturation, increased competition, or economic factors affecting consumer spending in the hobby, toy, and game industry.

2007 to 2008 Recovery: The recovery in these years might have been driven by a resurgence in consumer interest, new product innovations, or effective marketing strategies that temporarily boosted sales.

2009 Sharp Decline: The drastic decline in 2009 likely reflects the impact of the global financial crisis, which led to reduced consumer spending across many sectors, including discretionary spending on hobbies and toys.

Overall, the yearly growth trend shows initial stability, followed by a period of decline, a brief recovery, and then a sharp downturn, likely due to broader economic conditions.

3)

1. Identify Recession Periods:

Based on the chart provided, the relevant recessions during this period are:

2001 Recession: Occurred from March 2001 to November 2001.

Great Recession: Began in December 2007 and lasted until June 2009.

2. Overlay Recession Periods on Sales Data:

Use the following steps:

a. Create a Monthly Sales Time Series:

If you have monthly sales data from 1998 to 2009, plot this data as a line chart with the x-axis representing time (months) and the y-axis representing sales.

b. Highlight Recession Periods:

On the same chart, shade or mark the periods corresponding to March 2001 to November 2001 and December 2007 to June 2009. This will visually separate recession periods from non-recession periods.

3. Analyze and Compare:

Visual Analysis: Check if the line dips or changes trajectory significantly during the shaded recession periods.

Numerical Analysis: Calculate the average monthly sales during recession periods and compare them to the average sales during non-recession periods. This will help quantify the impact.

4. Expected Outcome:

2001 Recession: If sales declined during the 2001 recession, you would likely see a dip in the sales line or a lower average for the recession period compared to the surrounding months.

Great Recession: Similarly, a significant drop during the Great Recession would likely appear as a steep decline in the line, particularly from late 2007 through 2009, reflecting the sharp downturn in economic activity during this period.

This approach will clearly demonstrate how economic downturns (recessions) impacted the sales of Hobby, Toy, and Game stores, showing whether the business was sensitive to economic cycles.

By visualizing the sales data alongside the identified recession periods, you can effectively illustrate the correlation between economic recessions and business performance, specifically highlighting any downturns during the recessions.