World Petroleum Consumption

1. The table gives you the amount of petroleum consumed by the world from 1973 to 2016 in millions of barrels per year.

Graph your data in Desmos by creating a table

2. What do you notice?

3. What do you wonder?

4. Use your graph to make a guess at the world daily petroleum consumption in 2023 (the year you graduate high school) and 2027 (the year you graduate college.)

5. Enter the formula $y_1 \sim mx_1 + b$

This shows a line that approximates the data. The r^2 value tells you how accurate it is (the closer to 1, the more accurate.)

6. Enter the formula $y_1 \sim a(b)^{\wedge}x_1$

This shows an exponential curve that approximates the data. The r^2 value tells you how accurate it is (the closer to 1, the more accurate.)

7. According to the r^2 value, which better approximates the data—the line or the exponential curve?

8. How are the line and the curve different the farther into the future you go?

Year	Millions of Barrels per Day
1973	57.24
1974	56.68
1975	56.20
1976	59.67
1977	61.83
1978	64.16
1979	65.22
1980	63.11
1981	60.95
1982	59.62
1983	58.85
1984	59.64
1985	59.91
1986	61.80
1987	63.06
1988	64.96
1989	66.05
1990	66.66
1991	66.96
1992	67.24
1993	67.00
1994	68.42
1995	69.85
1996	71.91
1997	73.13
1998	73.95
1999	75.60
2000	77.29
2001	78.10
2002	78.84
2003	80.47
2004	83.62
2005	84.92

Year	Millions of Barrels per Day
2006	86.13
2007	87.55
2008	87.04
2009	86.07
2010	88.85
2011	89.65
2012	91.01
2013	92.41
2014	94.04
2015	96.06
2016	97.10

Source: US Energy Information Administration, www.eia.gov

The actual page where I got the data is here.

https://www.eia.gov/beta/international/data/browser/#/?
pa=0000001&c=4100000002000060000000000000g00020000000000000001&tl_id=5-
A&vs=INTL.5-2-AFRC-TBPD.A&cy=2016&vo=0&v=H&end=2018&s=INTL.5-2-WORL-TBPD.A