1970: $\$ 243,537$
1989: \$1,623,579
1997: $\$ 5,357,811$
1998: $\$ 63,157,232$
1999: \$212,000,000
2003: \$515,000,000
2004: \$647,000,000
2005: \$663,000,000
2006: \$749,000,000
2007: \$882,000,000
2008: \$957,000,000
2009: \$1,059,000,000
2010: \$1,291,000,000
2014: \$4,800,000,000

## SPORTS

## New National Basketball Tournament

There is a new national basketball tournament that invites 256 teams to enter. After round 1 there are 128 teams and after round two there are 64 teams remaining and 32 teams after round four. How many games will the national tournament have to pay for referees?

## NBA Salary

The average NBA salary in 1980 was about $\$ 170,000$, and the salaries have increased drastically in the last thirty years. Kobe Bryant is an example of this with a salary of $\$ 23.5$ million for the 2014-2015 season! The table below shows the average salary of an NBA player since 1980. (BE CAREFUL WITH X's)


| Years since 1980 | Annual Average Salary in thousands of dollars |
| :--- | :--- |
| 0 | 170 |
| 5 | 325 |
| 19 | 750 |
| 15 | 1,900 |
| 16 | 2,000 |
| 17 | 2,200 |
| 18 | 2,600 |

## SPORTS

NBA Minimum Salaries for 2017/18.
Listed below are minimum salary figures, sorted by years of NBA experience.

| Years of Experience | $\underline{\text { Salary }}$ |
| :---: | :---: |
| 0 | $\$ 815,615$ |
| 1 | $\$ 1,312,611$ |
| 2 | $\$ 1,471,382$ |
| 3 | $\$ 1,524,305$ |
| 4 | $\$ 1,577,230$ |
| 5 | $\$ 1,709,538$ |
| 6 | $\$ 1,841,849$ |
| 7 | $\$ 1,974,159$ |
| 8 | $\$ 2,106,470$ |
| 9 | $\$ 2,116,955$ |
| $10+$ | $\$ 2,328,652$ |

## SPORTS

Roger Goodell, the NFL's commissioner, made $\$ 34$ million during 2014, and he is hoping the NFL will bring in $\$ 25$ billion in revenue by 2027.

NFL Revenue in Billions of U.S. Dollars
2002: 4.94
2004: 6.03
2006: 6.54
2008: 7.57
2010: 8.35


2012: 9.17
2014: 11.09
2015: 12.9
2017: 14

## SPORTS

Super Bowl commercials were \$42,000 per 30 second add in 1967.

| Years since 1970 | Cost of 30 second commercial in thousands |
| :--- | :--- |
| 0 | 78 |
| 5 | 107 |
| 10 | 220 |
| 15 | 525 |
| 20 | 700 |
| 25 | 1,150 |
| 35 | 2,400 |
| 40 | 2,800 |
| 41 | 3,000 |
| 47 | 5,002 |



Find additional (years, cost) at ama.org
"The History of Super Bowl Commercial Costs"

## SPORTS

Super Bowl tickets were $\$ 74.98$ in 1967 (Inflation-adjusted price).

| Years since 1970 | Cost of average ticket price (\$) |
| :--- | :--- |
| 0 | 98 |
| 8 | 118 |
| 14 | 145 |
| 20 | 242 |
| 21 | 275 |
| 29 | 488 |
| 35 | 1,170 |
| 39 | 1,400 |
| 42 | 2.000 |
| 45 | 4,314 |
| 48 |  |



Find additional (years, cost) at gobankingrates.com
"The First Super Bowl Cost \$10

- See How It's Changed Since 1967"


## COLLEGE TUITION

Tuition at Luther College (Iowa) from 1999 to 2010

| Year since 1999 | In-state tuition and fees |
| :--- | :--- |
| 0 | 22221 |
| 1 | 22403 |
| 2 | 22663 |
| 3 | 24201 |
| 4 | 25227 |
| 5 | 26199 |
| 6 | 26838 |
| 7 | 28224 |
| 8 | 29569 |

## COLLEGE TUITION

Tuition at Minneapolis Community and Technical College from 1999 to 2010.

| Year since 1999 | In-state tuition and fees |
| :--- | :--- |
| 0 | 3018 |
| 1 | 3077 |
| 2 | 3381 |
| 3 | 3694 |
| 4 | 4048 |
| 5 | 4413 |
| 6 | 4400 |
| 7 | 4585 |
| 8 | 4885 |

## COLLEGE TUITION

Tuition at University of Pittsburgh from 1999 to 2010.

| Year since 1999 | In-state tuition and fees |
| :--- | :--- |
| 0 | 8608 |
| 1 | 8676 |
| 2 | 9161 |
| 3 | 10162 |
| 4 | 10831 |
| 5 | 12299 |
| 6 | 12492 |
| 7 | 12986 |
| 8 | 14154 |

## COLLEGE TUITION

Tuition at Macalester College (St. Paul, MN) from 1999 to 2010.

| Year since 1999 | In-state tuition and fees |
| :--- | :--- |
| 0 | 26589 |
| 1 | 26782 |
| 2 | 27683 |
| 3 | 28327 |
| 4 | 29280 |
| 5 | 30442 |
| 6 | 33207 |
| 7 | 34545 |
| 8 | 37473 |

## COLLEGE TUITION

Tuition at University of Miami (Florida) from 1999 to 2010.

| Year since 1999 | In-state tuition and fees |
| :--- | :--- |
| 0 | 27439 |
| 1 | 27912 |
| 2 | 28949 |
| 3 | 29564 |
| 4 | 30693 |
| 5 | 31616 |
| 6 | 32239 |
| 7 | 33475 |
| 8 | 33852 |

## COLLEGE TUITION

Tuition at University of Florida from 1999 to 2010.

| Year since 1999 | In-state tuition and fees |
| :--- | :--- |
| 0 | 11307 |
| 1 | 11454 |
| 2 | 12191 |
| 3 | 13817 |
| 4 | 15517 |
| 5 | 17974 |
| 6 | 18109 |
| 7 | 21188 |
| 8 |  |

## COLLEGE TUITION

Tuition at University of Minnesota from 2001 to 2010.
University of Minnesota (St. Paul/Minneapolis- without room \& board)

| Year since <br> 2001 | In-State <br> Tuition and Fees |
| :---: | :---: |
| $0(2001)$ | 6779 |
| 1 | 7483 |
| 2 | 8311 |
| 3 | 9118 |
| 4 | 9636 |
| 5 | 10028 |
| 6 | 10135 |
| 7 | 10916 |
| $9(2010)$ | 11287 |

## COLLEGE TUITION

Tuition at Iowa State University from 1999 to 2010.

| Year since 1999 | Out-of-State <br> Tuition and Fees |
| :---: | :---: |
| 0 | 12350 |
| 1 | 13588 |
| 2 | 13195 |
| 3 | 15255 |
| 4 | 16783 |
| 5 | 17180 |
| 7 | 17811 |
| 8 | 17871 |
| 9 | 18563 |

## CAR VALUE

The table below shows the depreciation of the value of an Escalade purchased new in 2010

| Year starting in 2010 | Value of a Cadillac Escalade (\$) |
| :--- | :--- |
| 0 | 35998 |
| 1 | 30228 |
| 2 | 25500 |
| 3 | 22336 |
| 4 | 17900 |
| 5 | 15065 |
| 6 | 12900 |

## CAR VALUE

The table below shows the depreciation of the value of a Subaru Impreza WRX-STI purchased new in 2008.

| Year starting in 2008 | Value of a Subaru Impreza WRX-STI (\$) |
| :--- | :--- |
| 0 | 22690 |
| 1 | 18606 |
| 2 | 15257 |
| 3 | 12511 |
| 4 | 10259 |
| 5 | 8412 |
| 6 | 6900 |

## CAR VALUE

The table below shows the depreciation of the value of a Toyota Camry purchased new in 2009

| Year starting in 2009 | Value of a Toyota Camry (\$) |
| :--- | :--- |
| 0 | 19590 |
| 1 | 16652 |
| 2 | 14154 |
| 3 | 12031 |
| 4 | 10226 |
| 5 | 8692 |
| 6 | 7388 |

## The CCXR Trevita Value

The CCXR Trevita is the most expensive street-legal production car in the world. Why so much coin? With no exaggeration, the car is literally coated in diamonds. A Swedish manufacturer developed a new exterior finish called the Koenigsegg Proprietary Diamond Weave, which involves coating carbon fibers with a diamond dust-impregnated resin. We can't even fathom how much the touch up paint costs. Underneath the lustrous finish lies a 4.8 -liter, dualsupercharged V8 with a total output of $1,004 \mathrm{hp}$ and $797 \mathrm{lb}-\mathrm{ft}$, which means it should have little to no trouble overtaking semis on the freeway. The car's specifications in both performance and price are truly spectacular and just three were ever made.

Estimated Value:
2015: $\$ 4,800,000$
2016: $\$ 3,900,000$
2017: \$3,700,000
2018: $\$ 3,600,000$
2019: \$3,550,000
2020: $\$ 3,500,000$

## Disease and Health

## Zombie Virus: WARNING TRICKY!



On a Tuesday morning at 7am a teacher came to school infected with a zombie virus. Two hours later three staff and four students were infected and an hour, after that six staff and 15 students were infected. At $12 \mathrm{pm}, 12$ staff members, and 30 students were infected. At 3pm four visitors, 14 staff, and 90 students were infected. Help the Minnesota Department of Health and Emergency Managers fight such an outbreak through finding the rate of growth and predicting the future.

On May 4th, 2014, the World Health Organization (WHO) was tracking the outbreak of Ebola in West Africa, and as of February 2016 11,301 people have died from the spread of Ebola. Below is a table of the number of cases of Ebola. (** These were cases that were either suspected, probable or laboratory-confirmed.)

| Days past 5-4-2014 | Cases of Ebola ** |
| :--- | :--- |
| 0 | 250 |
| 1 | 279 |
| 2 | 307 |
| 7 | 530 |
| 20 | 2250 |
| 21 | 2601 |
| 22 | 2939 |

## Disease and Health

## Ebola Virus 2.0

On May 4th, 2057, the World Health Organization (WHO) was tracking the outbreak of Ebola in West Africa. Below is a table of the number of cases of Ebola. (** These were cases that were either suspected, probable or laboratory-confirmed.)

| Days past 5-4-2057 | Cases of Ebola ** |
| :--- | :--- |
| 0 | 240 |
| 1 | 276 |
| 3 | 309 |
| 7 | 539 |
| 15 | 2299 |
| 16 | 2609 |
| 19 | 2873 |

On May 4th, 2019, the World Health Organization (WHO) was tracking the outbreak of Ebola in West Africa. Below is a table of the number of cases of Ebola. (** These were cases that were either suspected, probable or laboratory-confirmed.)

| Days past 5-4-2019 | Cases of Ebola ** |
| :--- | :--- |
| 0 | 241 |
| 1 | 270 |
| 2 | 301 |
| 4 | 522 |
| 5 | 2203 |
| 6 | 2505 |
| 7 | 2921 |

## Disease and Health

## Zika Virus 1.0

On January 28th, 2014, the World Health Organization (WHO) reported that the Zika virus is "spreading explosively" and the level of alarm is "extremely high". The Centers for Disease Control confirmed 31 cases initially reported in the United States, and the numbers of infected mothers continue to grow. The table below shows the growth of the virus.

| Days past $1 / 28 / 16$ | Cases of ZIKA in the U.S. |
| :--- | :--- |
| 0 | 31 |
| 1 | 33 |
| 2 | 40 |
| 4 | 55 |
| 5 | 61 |
| 6 | 70 |
| 7 | 80 |

On January 28th, 2014, the World Health Organization (WHO) reported that the Zika virus is "spreading explosively" and the level of alarm is "extremely high". The Centers for Disease Control confirmed 20 cases initially reported in the U.S. territories (Puero Rico and U.S. Virgin Islands), and the numbers of infected mothers continue to grow. The table below shows the growth of the virus.

| Days past $1 / 28 / 16$ | Cases of ZIKA in U.S. TerrItories |
| :--- | :--- |
| 0 | 20 |
| 1 | 23 |
| 2 | 27 |
| 4 | 35 |
| 5 | 40 |
| 6 | 48 |
| 7 | 57 |

## Technology

## Size of Web Pages

(Size of Web pages) The size of webpages on the internet has grown dramatically since 1994, which had an average size of 20 killabits (kb). In 2003, 2004, and 2005, the growth continued with average sizes of $100 \mathrm{~kb}, 124 \mathrm{~kb}$, and 155 respectively. Even seven years ago in 2010, the average size of a webpage was very big at 600 kb . In 2011 and 2012, the average size of a webpage jumped to 740 kb and 933 kb . By the end of 2014 , webpages were averaging 1243 kb , and 2015 reports showed the average being over 2000 kb !

## Technology

## CELL PHONE USERS IN MINNEAPOLIS

| Years | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of <br> Cell Phone <br> users | 498 | 970 | 1527 | 2692 | 4777 | 8986 | 14925 | 29069 |

IN THE MILLIONS!!!

| Years | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number <br> of <br> Cell <br> Phone <br> users | 5.283 | 7.557 | 11.03 | 16.01 | 24.13 | 33.76 | 44.04 | 55.31 | 69.21 | 86.05 | 109.5 |


| Years | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number <br> of <br> Cell Phone <br> users | 128.4 | 140.8 | 158.7 | 182.1 | 207.9 | 233 | Not <br> available | 262.7 | 276.6 | 300.5 |

## Technology

Annual Video Game and Computer game Sales (Billions of Dollars)
2001: \$6.9
2003: \$7.0
2005: \$6.9
2007: \$9.5
2009: \$10.5


2011: \$11.7
2013: \$15.4
2015: \$16.5
2017: \$16.9

## Technology

Facebook users at the end of each year.
2004: 1 million
2005: 5.5 million
2006: 12 million
2007: 50 million

2008: 100 million
2009: 350 million


2010: 608 million
2011: 845 million
2012: 1.06 billion
2013: 1.19 billion
2014: 1.23 billion
2015: 1.44 billion
2016: 1.86 billion
2017: 2.2 billion

## Technology

## I-Phone Value

A new 64 gb iPhone 6 s was sold for $\$ 700$ at the beginning of January 2016. Based on previous research the phone's expected value after 1 month later would be $\$ 610$ with a value at the beginning of March $\$ 589$. The following three months value are estimated at in order: $\$ 550, \$ 500$, and $\$ 425$. By the end of 2016, the $6 s$ phone is only worth $\$ 255$.


# Average Height of Females Based on Age 

Age Height in inches
235
439
645
850
$10 \quad 55$
1260


14
62
$16 \quad 63$

## HODGE-PODGE

## Minnesota Wolf Population

The Minnesota Wolves population has changed over the years and Minnesota Wolves have been listed under the federal Endangered Species Act. During the year of 1989, there was an estimated wolf population of 1521 . Over 10 years the population grew to around 2445. In 2010, there was an estimated population of 2,502 , wolves. In 2011, there were an estimated 2,444 and in 2012, 2,332. In
 2013, there was an estimated wolf population of 2,423 . In 2014, the population was around 2,221. By the end of 2015, the population was estimated at 2,036. The goal of Minnesota Department of Natural Resources is to maintain a population of at least 1,600 wolves.

The table below shows the number of stars identified by astronomers over the years since 1850. An amazing 28,450 stars were identified in 1985 !

| Years since 1850 | Number of stars identified |
| :--- | :--- |
| 0 | 24 |
| 25 | 143 |
| 26 | 154 |
| 46 | 393 |
| 47 | 405 |
| 65 | 1687 |
| 73 | 2233 |
| 74 | 2457 |
| 135 | 28,450 |

## HODGE-PODGE

## Minneapolis Average Rent Cost

2007: \$883
2008: \$913
2009: \$907
2010: \$899
2011: \$886
2012: \$909


2013: \$911
2014: \$955
2015: \$1002
2016: \$1376
2017: \$1544

## Criminal Justice

The "Sentencing Project" compiles state-level criminal justice data from a variety of sources. The data provides a look at how the United States increased its prison population since 1980. The prison population in the U.S. began to decline after 2008, but the growth has continued in a couple Midwest states.

| Years since $\mathbf{1 9 8 0}$ | Prison population in the US (In hundreds of thousands) |
| :---: | :---: |
| 0 | 316 |
| 5 | 482 |
| 10 | 740 |
| 12 | 847 |
| 14 | 1,017 |
| 15 | 1,100 |
| 17 | 1,205 |
| 20 | 1,335 |
| 23 | 1,408 |
| 26 | 1,500 |
| 28 | 1,540 |

Sentencingproject.org

## Criminal Justice

The "Sentencing Project" compiles state-level criminal justice data from a variety of sources. The data provides a look at how the Minnesota increased its prison population since 1980. The prison population in the U.S. began to decline after 2008, but the growth has continued in a couple Midwest states.

| Years since 1980 | Prison population in Minnesota |
| :---: | :---: |
| 0 | 2,100 |
| 7 | 2,546 |
| 10 | 3,176 |
| 11 | 3,472 |
| 15 | 4,846 |
| 16 | 5,158 |
| 22 | 7,129 |
| 24 | 8,758 |
| 25 | 9,281 |
| 29 | 9,986 |
| 33 | 10,289 |
| 35 | 10,798 |

Sentencingproject.org

## HODGE-PODGE

UBER: Number of Active Driver-Partners in US per month (Uber.com)
"An active driver is defined as a driver-partner who completed at least four trips in a month."
January 2012: 0
July 2012: 100
January 2013: 4999
July 2013: 9780
January 2014: 32,000
July 2014: 72,400
January 2015: 132,000
July 2015:300,500
January 2016: 462,000
January 2017: 1,500,000

## HODGE-PODGE

The table below shows the approximate frequencies of the notes in the octave from middle $C$ up to the next $C$ on a piano.

| Note Name | Note number <br> above middle C | Frequency $(\mathrm{Hz})$ |
| :--- | :--- | :--- |
| Middle C | 0 | 260 |
| C\# | 1 | 277 |
| D | 2 | 294 |
| D\# | 3 | 315 |
| E | 4 | 334 |
| F | 5 | 357 |
| F\# | 6 | 370 |
| G | 7 | 398 |
| G\# | 8 | 415 |
| A | 9 | 450 |
| A\# | 10 | 471 |
| B | 11 | 501 |
| C above middle C | 12 | 533 |

