## Harper's index

> We inference constantly in our daily lives, sometimes effectively at other times ineffectively. When determining on your own whether information presented to you is leading you to make or draw a certain conclusion, it is important to see and question how that information is being presented. In this exercise we will make use of several instances of a regularly published section from Harper's Magazine. The section is called "Harper's Index" and is a regular monthly feature of the magazine. In fact you can do this exercise with any of the more current indices. You can find them here: https://harpers.org/harpers-index/ .

For this exercise you will make two columns: the first is where you will place one of the facts listed in the index and the second is where you will place the inference that fact is suggesting to you as a reader.

| What Does It Say? | What Does It Mean? | $\begin{array}{c}\text { Is there another way of } \\ \text { looking at this statement? }\end{array}$ |
| :--- | :--- | :--- |
| Literal Statement | Inference | Alternative Inference | \left\lvert\, \(\left.\begin{array}{ll}Number of U.S. doctors per <br>

pharmaceutical sales <br>
representative in 1995 and <br>
2002 respectively: \mathbf{1 9} and 9.\end{array} $$
\begin{array}{l}\text { Drug companies are } \\
\text { flourishing. There must be } \\
\text { money to be made to hire so } \\
\text { many salespersons. }\end{array}
$$ \quad $$
\begin{array}{l}\text { More individuals are deciding } \\
\text { upon careers in pharmaceutical } \\
\text { sales than in medicine. }\end{array}
$$\right.\right]\)

## Harper's InDex

Estimated number of Americans who have top-secret security clearance : 1,400,000 Average annual cost of detaining an inmate at the military prison at Guantánamo Bay : \$900,000

At a supermax prison in the United States : \$65,000
Number of terrorist attacks made against diplomatic targets worldwide since $1970: 2,865$
Number of those attacks made against American targets : 520

Chance an African-American child has an incarcerated parent: 1 in 9
Number of years in prison to which a Texas man was sentenced in May for stealing a thirty-five-dollar rack of pork ribs : 50
Percentage of all petitions to hear a case the Supreme Court has granted in the past three years : 1 Percentage of petitions it has granted that were supported by an amicus brief from the U.S. Chamber of Commerce: 32
Factor by which the average white U.S. family was wealthier than the average non-white U.S. family before the recession : 4
Factor by which it is now : 6
Percentage of global GDP, adjusted for purchasing power, produced by developing economies in 1980 :

Portion of people killed by Australian police since 1989 who were mentally ill : 1/2 Percentage of authorized U.S. rearms dealers the ATF hasn't inspected in the past ve years :58 Chance a U.S. youth considered at risk for suicide lives in a home with a gun : 1 in 5 Portion of young people attempting suicide without a gun who die from the attempt : 1/10

Of those attempting suicide with a gun who do : 9/10
Number of Americans who died in motor-vehicle accidents in $2010: 33,687$
Who died of suicide : 38,364
Estimated number of fingers lost to table saws annually : 4,000
Percentage of men in dual-income marriages who said they struggled with work-family conict in $1977: 35$
Who say they do today: 60
Portion of live-in domestic workers who make less than minimum wage : 2/3
Who are required to work during their scheduled time off : $3 / 5$
Percentage change in the number of Walmart stores nationwide since $2008:+13$
In the size of Walmart's retail workforce : 0
Estimated number of homeowners whose foreclosure-abuse settlements were affected in May by a "clerical error" : 96,000
Amount these homeowners were underpaid : \$44,600,000
Number of applicants for 350 investment-banking internships Goldman Sachs offered to undergraduates this summer : 17,000
Average cost after financial aid to attend NYU for a freshman from a family making \$30,000 a year or less : \$25,462
Percentage of American cats that are overweight : 58

Number of U.S. retail jobs Doritos Locos tacos created in the past year, according to Taco Bell : 15,000 Number of retail jobs created worldwide by Apple in that same period : 400

Portion of U.S. factory workers who have a college degree : $1 / 4$
Portion of university teaching positions that are lled by graduate students or adjunct faculty : 3/4
Percentage of college professors teaching online courses who do not believe students should receive credit for them : 72
Number of U.S. states whose highest-paid public employee is a sports coach : 37
Number of U.S. educators who have signed up for the Armed Teacher Training Program : 1,475
Date on which Nelson, Georgia, passed the Family Protection Ordinance, mandating gun ownership : 4/1/2013
Chance that a U.S. gun owner has ever called or written a member of Congress about gun-control legislation : 1 in 5

That someone living in a household without a gun has: 1 in 10
Number of bills strengthening gun control that have been signed into law since the Sandy Hook shooting :

Number weakening gun control : 37
Portion of Americans who envision "occasional acts of terrorism" as part of future life in the United States : 3/4
Estimated pounds of unreported ammonium nitrate held at a Texas fertilizer plant that exploded in April : 540,000
Factor by which this amount exceeds the threshold for reporting to the Department of Homeland Security : 270
Number of publicly traded companies at which directors lost shareholder elections in the past three years : 175
Number of those directors who subsequently stepped down : 9
Factor by which a conservative is less likely to buy a uorescent bulb if it is advertised as good for the environment: 2
Years it took for the western margin of the Quelccaya ice cap in the Peruvian Andes to form : 1,600 Years it took this area to melt : 25
Portion of Arab youth who say they are "more proud to be an Arab" since the Arab Spring : 9/10
Who think their own governments have become more transparent in that time : 1/2
Portion of the Syrian population that will require humanitarian aid by the end of the year: 1/2
Estimated number of political assassinations in the Philippines since 2001:589
Chance that a Russian supports changing St. Petersburg's name back to Leningrad : 1 in 3
Portion of Americans who are unaware that Obamacare is law : 2/5
Percentage change in the expected prots to a hospital if a patient experiences surgical complications: +107
Minimum number of immigrants who have been involuntarily repatriated by U.S. hospitals in the past ve years: 600
Minimum number of immigrants who have been involuntarily repatriated by U.S. hospitals in the past ve years: 600
Ination-adjusted amount an average single man who turned sixty-ve in 2010 contributed to Medicare : \$61,000
Amount he can expect to receive in benets : \$180,000
Portion of U.S. stock-market activity that is made up of computer-assisted "microtrades" : $1 / 2$
Projected cost of the transatlantic ber-optic cable being laid on the ocean oor this year : \$300,000,000
Estimated number of seconds by which it will reduce the time to make a trade between New York and London : 0.0049
Estimated number of Beijing residents who live underground : 2,000,000
Number of early deaths in China in 2010 that have been attributed to air pollution : 1,200,000
Amount the Chinese government has budgeted for national defense this year : \$117,000,000
For domestic security : \$125,000,000
Volts of electricity delivered by anti-rape lingerie developed by three students in India : 3,800,000
Percentage of criminal suspects asked to waive their Miranda rights and speak to police who do so : 84
Number of female prison guards impregnated by a single Baltimore City Detention Center inmate in the past year: 4
Percentage change in the past twenty-ve years in the Consumer Price Index : +41
In the price of beer : +40
Of books : -1
Number of students currently attending the thirteen Washington, D.C., public schools expected to close
this year : 2,633
Number of them who are white : 2
Percentage increase in per-student spending at major public U.S. colleges since $2005: 23$
In per-student spending on college athletes: 61
Percentage of U.S. college graduates who are women : 51.1
Of Fortune 500 CEOs who are : 4.2
Value of the Girl Scout cookies a South Carolina man stole from a warehouse this February : \$18,900
Amount the NIH has awarded in grants since 2011 to study the correlation between obesity and homosexuality : \$1,520,000
Estimated amount by which federal tax revenue will increase if the Defense of Marriage Act is overturned : \$35,000,000
Percentage change since 1970 in the portion of U.S. children growing up in single-parent households : +133

Amount North Dakota's attorney general requested the state to budget for legal challenges to its new abortion laws : \$400,000
Portion of English children born out of wedlock in 1981 : 1/5 In 2011: 1/2
Number of Falkland Islands residents who voted in favor of remaining part of the United Kingdom in a
March referendum : 1,513
Who voted against : 3
Percentage of state-owned land in the West Bank allocated by the Israeli government for Palestinians : 0.7

For Israeli settlers : 51
Amount awarded in March to a paraplegic man trapped for thirty minutes in Disneyland's "it's a small world" ride : \$8,000
Estimated number of minutes needed to II out the benet paperwork required by Obamacare : 45
Percentage change since Obama took ofce in the number of veterans waiting more than a year for federal benets : +2,231
Estimated number of patients a Brazilian doctor is suspected of having killed in order to free up hospital beds : 300
Estimated number of chicks killed in a March re at a Perdue "research facility" : 8,000
Portion of U.S. river miles capable of supporting "healthy biological communities," according to the EPA :
$1 / 5$
Amount a Tucson mayoral candidate has raised to give out free guns in the city's high-crime
neighborhoods : $\$ 13,000$
Percentage of the airtime on Fox News that is dedicated to opinion : 55
Of the airtime on MSNBC : 85
Percentage of personal income the average American making more than $\$ 200,000$ a year gives to charity : 4.2
Percentage the average American making between $\$ 50,000$ and $\$ 100,000$ a year gives : 6 Chance that a white American thinks antiwhite bias is more prevalent than antiblack bias : 1 in 2

Portion of religious Americans who believe in reincarnation : $1 / 4$ Portion of nonreligious Americans who do : 1/4
Percentage of known human genes that are patented : 100
Portion of those caught in possession of drugs by the U.S. Border Patrol who are U.S. citizens : $3 / 4$
Number of ploughshare tortoises found in a suitcase at a Thai airport in March : 54
Estimated world population of ploughshare tortoises : 400

Chance that a U.S. combat pilot suffers from a mental-health problem : 1 in 17
That a remote drone pilot does : 1 in 12
Estimated percentage change since 2007 in the number of U.S. veterans committing suicide each day : +22
Portion of all active-duty U.S. service people who committed suicide in 2011 who had never been deployed: 1/2
Number of people killed in mass shootings in the United States last year : 66
Number killed by Muslim-American terrorists since September 11, 2001 : 33 Number of former prosecutors President Obama has nominated to the federal judiciary : 99

Number of former public defenders : 33
Number of presidential question-and-answer sessions held with the media during George W. Bush's rst term : 355
During Obama's first term : 107
Number of on-air minutes during last fall's campaign season that CNN devoted to climate change : 23 To Joe Biden's smile : 43
Percentage change in the incomes of the top 1 percent of earners during the economic recovery : +11.2
Of the bottom 99 percent : -0.4
Chance that an American has been laid off at least once since the start of the recession : 1 in 4
Portion of Americans who believe that they are "living the American dream" : 1/4
Prots earned by Facebook last year : \$1,100,000,000
Tax refund the company received from the federal government : \$429,000,000
Percentage of movies that led the U.S. box ofce for at least one weekend in 2011 that featured Apple products : 42
Portion of all North American Internet trafc accounted for by videos streamed from Netix : 1/4
Rank of the United States among porn actor-producing nations : 1
Rank of Hungary : 2
Number of amendments made to a February parliamentary bill legalizing same-sex marriage in France : 5,395
Chance an American provides financial support to both adult children and elderly parents : 1 in 9
Percentage change since 2001 in the number of U.S. young adults who have credit card debt : -22
In the number who have student-loan debt : +54
Minimum number of exams a student must take between third and twelfth grade under No Child Left Behind: 17
Percentage change since 1976 in the test-score gap between the children of America's richest and poorest deciles : +40
Amount Florida spent per student on testing in 1996 : $\$ 4.44$
Last year : \$30.59
Percentage change since 1980 in California's spending on public universities : -13 On prisons : +436
Number of U.S. states that have fewer abortion providers today than in $1978: 48$
Portion of U.S. women with a bachelor's degree who use sterilization as their primary form of birth control : 1/10
Of U.S. women without a high school diploma who do : $2 / 5$
Factor by which white girls are more likely than black girls to binge drink : 2
Percentage change since 2002 in the portion of U.S. women who use the morning-after pill : +175 Percentage of horses in the 2012 Kentucky Derby that had the thoroughbred Mr. Prospector in their pedigree : 95
That had him in their pedigree more than once : 55

Percentage of the U.S. population that is foreign-born : 13
Percentage that was foreign-born in 1913: 15
Change in the number of undocumented immigrants living in the United States since $2007:-900,000$
Portion of Republicans who supported a "path to citizenship" in a February Washington Post poll : 3/5
Who supported the same policy when President Obama's name was included in the question : 2/5
Amount the Obama Administration spent on immigration enforcement last year : \$18,000,000,000
Amount the Justice Department spent on all law enforcement : \$12,400,000,000
Percentage of U.S. Hispanics who "strongly disagree" with the statement that racism is "by and large a thing of the past" : 32
Of U.S. whites who do : 34
Of U.S. blacks : 58
Number of Alabama jury-sentencing recommendations in capital cases that have been overturned by judges since 1976:110
Number of those cases in which judges imposed the death penalty after juries recommended life in prison : 100
Number of Egyptian police ofcers charged for attacks against civilians during the country's revolution : 172
Number convicted : 2
Portion of American gun deaths in 2011 that were suicides : 2/3
Factor by which the NRA outspent all gun-control activist groups combined on lobbying in 2012:10
Minimum number of people accidentally shot at gun shows on "Gun Appreciation Day" in January : 5
Factor by which energy drink-related emergency-room visits have increased in the past eight years: 14
Number of reports of record-high temperatures by U.S. cities in 2012:362
Number of reports of record lows : 0
Estimated weight in pounds of debris left on the moon by NASA : 36,600
Rank of Canada among the largest producers of garbage per capita in the industrialized world : 1
Date on which Canada began withdrawing its penny from circulation : 2/4/2013
Estimated amount the withdrawal will save the government annually : \$11,000,000
Estimated amount Sarah Palin was paid per word she spoke on air during her two-year Fox News contract : \$15.85
Chances that a U.S. worker doesn't get paid sick leave : 2 in 5
Percentage change since 1969 in the portion of U.S. schoolchildren who walk or bike to school : -76
Pounds of candy given to each North Korean child in honor of Kim Jong Un's birthday, according to state media : 2
Chance a North Korean child suffers from stunting due to chronic malnutrition : 1 in 3
Percentage increase in the number of college students in China since 1989:700
Factor by which a recent college graduate in China is likelier than a peer with only elementary education to be unemployed: 4
Pollution level recorded on January 12 in Beijing on the Air Quality Index, a scale of zero to $500: 755$
Projected sales of "e-cigarettes" in the U.S. in 2013 : \$1,000,000,000
Percentage change since 1992 in the portion of U.S. women who diet : -32
Percentage change since 2007 in the number of parenting books published annually in the United States: +27
Percentage of U.S. women who believe they have a personal responsibility to help the worse off : 42 Of U.S. men : 27
Amount of pay increases the U.S. Treasury approved last year for executives at rms that received federal bailouts : \$6,162,208

Rank of chief executive officer among occupations most likely to attract psychopaths : 1
Number of the 400 wealthiest Americans who count as small-business owners under House Republicans' definition: 237
Percentage of the Bush tax cuts made permanent by the "fiscal cliff" compromise : 82
Portion of American households that will have a higher tax rate in 2013 as a result of the deal : $3 / 4$
Percentage of likely voters who identified themselves as Tea Party members in $2010: 24$
In 2012: 8
Portion of its annual budget that the state of Texas gives back in tax incentives to corporations : 1/2
Amount the National Rie Association's Victory Fund spent on the 2012 election : \$11,159,493
Percentage of that spending that went to support winning candidates: 0.44
Estimated portion of the world's privately held guns that are owned by Americans: 1/2
Number of U.S. children under the age of thirteen killed by rearms between 2006 and 2011: 680
Portion of Americans infected with HIV each year who are under the age of twenty-ve : 1/4
Projected minimum percentage increase by 2050 in the number of children worldwide with type 2 diabetes: 49
Estimated number of people who died because of high cholesterol in $2010: 2,000,000$
Because of air pollution : 3,200,000
Projected year by which annual rearm fatalities will surpass motor-vehicle fatalities in the United States : 2015
Chance that a U.S. driver admits to having fallen asleep at the wheel in the past thirty days : 1 in 20
Value of supermarket gift cards the City of Los Angeles gave out as part of a one-day gun buyback in December: \$155,375
Date of a state supreme court decision that requires the University of Colorado to allow guns on campus : 3/5/2012
Number of students there who have elected to live in dorms designated for those with concealed-weapon permits: 0
Percentage increase since 1982 in the portion of U.S. college students with a "problematic" level of narcissism : 60
Percentage of Americans under the age of thirty who can identify Roe v. Wade as a decision about abortion : 44
Weeks after conception that a proposed Michigan law would allow a fetus to be claimed as a dependent on tax forms : 12
Number of India's state legislators charged with "crimes against women" : 42
Cost of removing a prole from Potential Prostitutes, a user-sourced photographic database of suspected "offenders" : \$99.95
Cost of a four-hour session at a London "cuddle workshop" : \$46
Weight in pounds of ram penises shipped to China from an Icelandic slaughterhouse after an October trade agreement : 4,000
Minimum portion of chemical food additives approved by the FDA that the agency has never tested : 3/10 Portion of antimalarial drugs privately sold in sub-Saharan Africa that are fraudulently manufactured : $1 / 5$

Change in years in the life expectancy of a female in sub-Saharan Africa since $1970:-0.95$
Of a female in the Middle East : +16.9
Percentage of people killed by U.S. drone strikes in Pakistan in 2012 who were Taliban or AI Qaeda leaders : 2
Rank of Saudi Arabia among nations with the most viewers per capita of YouTube : 1
Portion of the world's countries in which Christians face religious harassment : $2 / 3$
Percentage of ongoing deportations dismissed following Obama's promise to "use discretion" in
immigration prosecutions: 4.8
Percentage change in the amount of money awarded to winners of the Nobel Peace Prize since 2011 : $-20$
Portion of U.S. law-school graduates from the past twenty-ve years not working as lawyers : 1/3 Chance a prisoner seeking a commutation of sentence under President Clinton received one : 1 in 90 Under George W. Bush : 1 in 780 Under Barack Obama : 1 in 6,631
Projected annual revenue Mexican drug cartels stand to lose from pot legalization in Colorado and Washington : \$1,400,000,000
Estimated minimum amount the Zeta cartel makes each year from the sale of coal : \$22,000,000 Minimum number of engineers and technicians it has kidnapped to run Radio Zeta and other telecommunications outlets: 21
Percentage rate at which Arcata, California, plans to tax excessive electricity use in an effort to punish marijuana growers : 45
Portion of California drivers on an average Saturday night who have potentially impairing drugs in their systems: 1/7
Portion of the U.S. House of Representatives' Democratic caucus that represents California or New York : 1/3

Amount that Crescent City, California, has budgeted for tsunami-defense construction : \$34,000,000
Percentage of children living in Japan's Fukushima Prefecture who have thyroid abnormalities : 40
Number of seconds the Long Island Power Authority spent discussing Hurricane Sandy in public meetings before the storm : 39
Number of hours before power was restored to the majority of Long Island residents affected by the storm : 361
Estimated feet by which Sandy shrank New Jersey's shoreline : 35
Last full month in which the average daily temperature did not exceed twentieth-century norms : 2/1985
Year by which the United States is projected to become the world's largest producer of oil : 2017
Percentage of U.S. troops in Afghanistan who consume at least one energy drink per day : 45
Percentage of those consuming three or more such drinks per day who "sometimes" or "often" fall asleep on the job: 44
Date of the first combat death of a female U.S. service member in Iraq : 3/23/2003
Date on which the U.S. Army began testing body armor designed for women : 8/20/2012
Estimated cost of maintaining Afghanistan's national security forces in the year after U.S. troops leave :
\$4,100,000,000
Annual budget of the Afghan government : \$3,300,000,000 (see pages 51-52)
Percentage of U.S. government contracts intended for small businesses that went to large corporations in 2011: 37
Portion of the total value of all U.S. currency accounted for by $\$ 100$ bills : 3/4 By coins: 1/25
Percentage by which an unemployed American is likelier to have a heart attack : 35
By which an American in poverty is likelier to have suffered depression : 96
Projected increase in the number of doctors in the U.S. health-care system by $2020: 50,100$
In the number of patients : 36,000,000
Pounds by which the average American's self-reported "ideal weight" has increased since 1990:13
Chance that an average American ate at McDonald's yesterday: 1 in 12
Value of the 220 diamonds swallowed by a South African jewel smuggler in November : \$265,000
Average price for an ounce of human breast milk at a U.S. hospital : \$4
Minimum number of pill capsules containing powdered human fetuses smuggled from China into South

Korea since 2011 : 28,864
Percentage of Americans who say China "can't be trusted" : 68
Chance that an Israeli Jew believes Israel practices "apartheid" against Palestinians : 1 in 2
Factor by which Northeasterners were more likely than Southerners to support racial integration in 1963 : 2.6

By which they are more likely to support gay marriage today : 1.5
Estimated number of roses the United States imports annually from Colombia and Ecuador for Valentine's Day: 184,830,000
Cost to have the remains of a cremated pet set off in a fireworks display by an Australian circus performer : \$990
Minimum number of years it will take to cross-breed an extinct species of Galapagos tortoise back into existence : 100
Percentage of the world's supply of donkey cheese that the tennis player Novak Djokovic intends to buy : 100

Percentage by which U.S. college enrollment is expected to decline this fall : 15
Average percentage by which a 2020 college graduate is projected to earn less in their first postgraduate year than a 2019 graduate : 20

Number of new jobs created in the United States since the end of the Great Recession : 21,275,000
Number of new unemployment claims filed in the four weeks after COVID-19 was declared a national emergency : 22,026,000

Percentage of U.S. small-business owners who say their business won't survive if the COVID-19 crisis lasts six months : 62

Of restaurant owners who say so : 85
Estimated number of U.S. restaurants that closed for good in March : 20,000
Percentage by which U.S. households earning at least $\$ 90,000$ per year are more likely to have groceries delivered : 80

Percentage of white workers in the United States who can work from home : 30
Percentage of black workers who can : 20
Of Latino workers : 16

# working with inference and Harper's InDex 

| What Does It Say? <br> Literal Statement | What Does It Mean? <br> Inference | Is there another way of looking at this statement? <br> Alternative Inference |
| :---: | :---: | :---: |
| Number of U.S. doctors per pharmaceutical sales representative in 1995 and 2002 respectively: 19 and 9. | Drug companies are flourishing. There must be money to be made to hire so many salespersons. | More individuals are deciding upon careers in pharmaceutical sales than in medicine. |
| Rank of chief executive officer among occupations most likely to attract psychopaths : 1 |  |  |
| Estimated number of roses the United States imports annually from Colombia and Ecuador for Valentine's Day : 184,830,000 |  |  |
| Chance an American provides financial support to both adult children and elderly parents : 1 in 9 |  |  |
| Percentage of employed U.S. mothers who think employed mothers look down on them: 66. |  |  |
| Percentage of full-time mothers who think employed mothers look down on them: 73. |  |  |

