

Mathematics and the Iraq War

Creating Balance in an Unjust World Conference on math education and social justice

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**For latest version of this handout, see:
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Rules of Engagement



A car is spotted approaching you from a distance of 100 meters, at a speed of 50 miles per hour. How many seconds before it reaches you?

This is a standard “contrived” distance = rate \times time problem; however it arose for me in the context of the Iraq Veterans Against the War Winter Soldier hearings in Silver Springs, Maryland, Mar. 13-16, 2008, as described below.

Background on the Rules of Engagement.

The Rules of Engagement, or ROE, specify how, when, and where military or police force should be used. Specifics are sometimes kept secret in military operations, but in Iraq the ROE adopted by the US military have been the subject of controversy.

“The rules of engagement are so central to Marine culture that they are treated as a closely held secret. During hearings in other cases, the courtroom has been cleared while evidence about the rules has been discussed. Reporters who travel with Marine battalions have to sign an agreement not to disclose such rules.

“A Marine must also have positive identification of a target as a threat. A target must have shown not just a hostile intent but also hostile actions.

“But the definitions of positive identification, hostile intent and hostile action are subjective, and thus can change from one area to the next, one day to the next, according to testimony.”

- “Marines keep combat rules to themselves”, *Los Angeles Times*, July 11, 2007

Former medic Jason Hurd (ten years service in the Army and Tennessee Army National Guard, served as medic in Baghdad, Nov. 2004-Nov. 2005) testifying at the Iraq Veterans Against the War’s Winter Soldier hearings, March 13-16, 2008, Silver Springs, Maryland:

"You had to have positive identification before you could engage a threat," Hurd told Truthout. "If you perceived a threat, you had to use other means to try to get away from that threat before you engaged it. So you had these things called levels of aggression: if you had a perceived threat, your first action should be to try to get it away using hand and arm signals. Next is to raise your weapon. If that doesn't stop the threat, you click the switch off of safe and fire a warning shot, If that doesn't work you continue on through these levels. If it's a car, you walk the bullets up the hood of the car. And your last resort is to kill the person driving."

“The ‘Rules’ of War,” By Maya Schenwar, *truthout* | Report, Mar. 26, 2008

(<http://www.truthout.org>)

From “The Ghosts Of Haditha,” *Time Magazine*, Sunday, Jun. 04, 2006, by Michael Duffy, Tim McGirk, Bobby Ghosh:

“Shout. Show. Shove. Shoot. Marines are trained to stop a suspicious Iraqi at a safe distance of about 400 meters with a shout or a gesture. If that does not work, they should make a show of force with a rifle. If that fails, they should fire a warning shot across the suspect's path. Then they should shoot to kill, if all else fails.”

The Consolidated Rules of Engagement for Iraq (2005) state about military targets, "All personnel must ensure that, prior to any engagement, non-combatants and civilian structures are distinguished from proper military targets," and include the following rules (Source: <http://wikileaks.cx/leak/us-iraq-rules-of-engagement.pdf>):

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...

3.G.(1) (S//REL) GRADUATED FORCE. If individuals pose a threat to Coalition Forces by committing a hostile act or demonstrating hostile intent, US Forces may use force, up to and including deadly force, to eliminate the threat. When time and circumstances permit, use the following graduated measures of force when responding to hostile act or hostile intent:

- 3.G.(1)(A) (U) Shout verbal warnings to halt;
- 3.G.(1)(B) (U) Show your weapon and demonstrate intent to use it;
- 3.G.(1)(C) (U) Physically restrain, block access, or detain;
- 3.G.(1)(D) (U) Fire a warning shot (if authorized);
- 3.G.(1)(E) (U) Shoot to eliminate the threat.

However, Jason Lemieux (Sergeant, USMC, three tours to Iraq, 2003-2006), as well as many other soldiers at the Winter Soldier Hearing, Mar. 14, 2008, testified as to the true purpose and subsequent breakdown of ROEs in Iraq (source: <http://www.ivaw.org>):

“Proper rules of engagement serve an important strategic purpose, which is to legitimize military force. By projecting an image of restraint and professionalism, militaries seek to reinforce the idea that they are protecting local residents rather than oppressing them. Not only do these rules undermine support for any local opposition, they also deflect accusations of occupation and oppression from foreign countries, and in some cases the people of the country the military is supposedly serving... The ROE have been broadly defined and loosely enforced to protect US service members at the expense of the Iraqi people, and anyone who tells you different is either a liar or a fool... During the invasion of Iraq, during the push North to Baghdad, the ROE given to me were gradually reduced, to the point of nonexistence. When we first crossed the Kuwait-Iraq border in March, 2003, we were operating under Geneva Convention Guidelines, and were authorized to shoot anyone wearing a military uniform, except for medical and religious personnel, unless they had surrendered. By the time we got to Baghdad, however, I was explicitly told by my chain of command that I could shoot anyone who came closer to me than I felt comfortable with, if that person did not immediately move when I ordered them to do so – keeping in mind I don’t speak Arabic. The general attitude that I got from my chain of command was, “Better them than us,” and the guidance that we were given reinforced that attitude across the ranks. It was an attitude that I watched intensify greatly throughout the course of my three tours. I remember in January of 2004 attending the formation where we were given what was going to be our mission for the second deployment, and I was sitting there like a good marine, with my pen and paper, ready to write down those carefully chosen thoughtful words that would justify my existence in Iraq for the next seven months. And my commander told me that my mission was, and I quote, to “kill those who need to be killed and save those who need to be saved.”

Investigating the Rules of Engagement mathematically

(1) Answer the question posed above: at 50 miles per hour, how long will it take a car to travel 100 meters? Show how you accomplish this calculation:

(2) 60 miles per hour may easily be converted to (a shorter distance) per (a shorter time). This facilitates estimating distances and times traveled mentally.

- (a) There are 60 minutes in an hour, so 60 miles per hour is the same as ____ miles per minute.
- (b) There are 5280 feet in a mile, so _____ miles per minute converts to ____ feet per minute.
- (c) There are 60 seconds in a minute, so 5280 feet per minute converts to ____ feet per second.
- (d) How might 60 miles per hour be converted to feet per minute in one calculation?

(3) 100 meters is approximately 110 yards, and 110 yards is 330 feet. Use the calculation from question 2 to mentally estimate the number of seconds a car traveling 50 miles per hour would take to cover 100 meters. Describe the calculation that you did to make this estimate:

(4) (a) On streets near your home, what is a reasonable distance within which to spot an approaching vehicle?
_____ Describe:

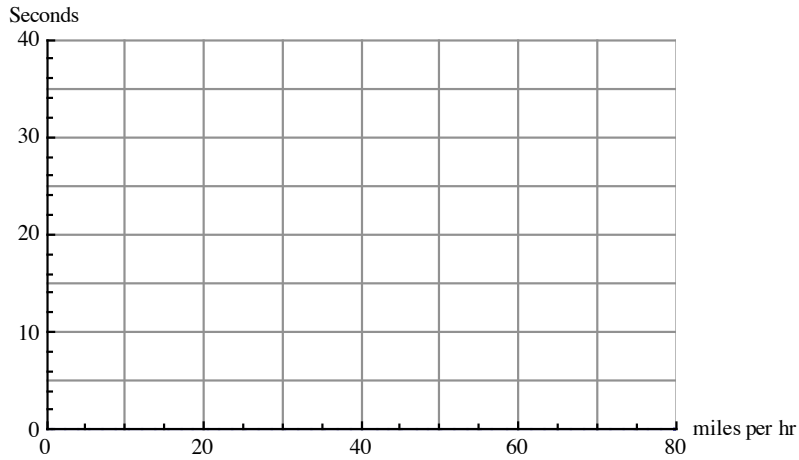
(b) How fast do cars typically drive on the streets described in part (a)? _____

(5) In your group, act out the sequence of ROE steps described above: Shout, Show, Shove, Shoot. How long might this take? _____. Describe any important issues that you think might arise in such a situation:

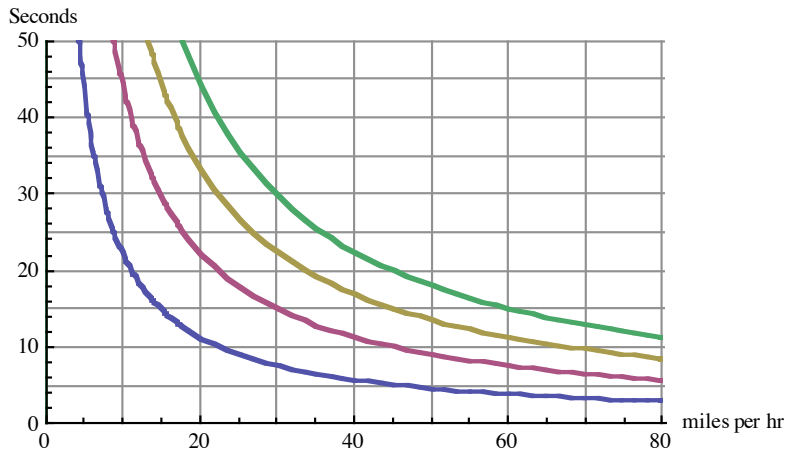
(6) Given the distance, speed, and time you wrote down in problems (4) and (5), is it possible or likely that the ROE could be followed in your neighborhood? Explain:

(7) Suppose the distance at which approaching cars are spotted is held to a constant 100 meters, but their speed and therefore also their time to arrive vary. Fill in the following chart of times as a function of speed (assume the cars' speeds remain constant over the 100 meters). Graph the data. What conclusions might you draw about the situation faced by those setting up street checkpoints?

Speed (mph)	Time (sec.)



(8) On the graph below are shown graphs similar to that which you probably found in problem 7, in this case for constant distances of 100, 200, 300, and 400 meters. Decide which is which. What conclusions might you draw?



(9) Do you think it is actually possible to follow the Rules of Engagement in traffic checkpoint situations? Why or why not? How does the information developed in this lesson reflect on the use of Rules of Engagement by the United States in Iraq?

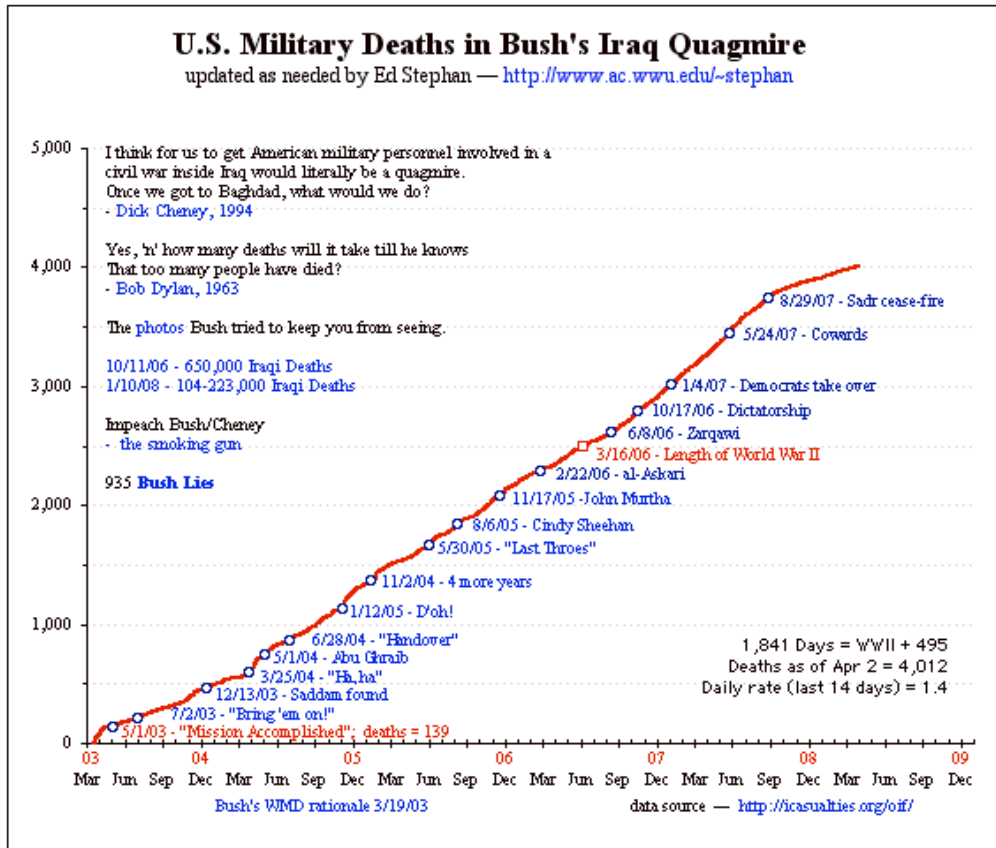
Follow-up activities: Rules of Engagement

- (1) Create a spreadsheet or visual/graphical display showing possible speeds, distances, and times for cars approaching a checkpoint. Display reasonable cutoff points for implementing Rules of Engagement. What issues do you think should be considered?
- (2) The speed in the original problem in this section, 50 miles per hour, was in “U.S. customary units” of miles per hour, while the distance was in metric units. Are metric system speeds familiar to you? What are some correspondences between common speeds expressed in U.S. customary units and metric units that would enable you to convert quickly from one system to another? (For example, as a result of working the problems above, you probably discovered that 60 miles per hour is the same as 88 feet per second. What are the metric correspondences for these speeds in kilometers per hour and meters per second? Which system or systems does the U.S. military use?)
- (3) Watch the winter soldiers hearings relating to Rules of Engagement, held Mar. 13-16, 2008, by the Iraq Veterans Against the War in Silver Springs, Maryland, and available at www.ivaw.org, or on youtube. What additional issues do you see relating to the traffic stop/checkpoint problem described in this activity?
- (4) How has the mainstream media covered issues related to the Rules of Engagement? How did they cover the Winter Soldier hearings in Silver Springs? How has the term Rules of Engagement come to be used in popular culture, for example what films, TV series, books, or documentaries have used the term, and in what ways?
- (5) Investigate the Rules of Engagement used in the Iraq War by the United States, England, or other countries involved in the occupation. How have they changed during the course of the war? What controversies have arisen? How do the U.S. Rules of Engagement compare to the Geneva Conventions? (For example, see Col. Dan Smith’s article at <http://www.counterpunch.org/smith12082004.html>.)
- (6) Create a play for class performance that deals with the issues raised in this lesson. You might consider a scene at a checkpoint, a scene in an Iraqi family’s home following a confrontation or death at a military checkpoint, a scene at a Rules of Engagement training session, a scene in a policy session at a high governmental level, or a scene in a soldier’s home after he or she returns from Iraq.
- (7) How many casualties, either Iraqi or U.S./Allies have occurred at automobile checkpoints? Investigate.
- (8) The United States has used large numbers of private contractors in this war. What, if any, are their Rules of Engagement, and who oversees them, if anyone? Investigate.
- (9) Often U.S. soldiers have fired on vehicles approaching their convoys, either traveling in the same direction or opposite the U.S. convoys. Create some math problems relating to Rules of Engagement and using probable speeds, times, and distances in these situations.
- (10) What other issues, activities, or problems might you create related to the Rules of Engagement? Describe:

(8) Resources used in this section:

- (a) Winter Soldier hearings at www.ivaw.org, especially sessions related to Rules of Engagement. Also interview with Jason Lemieux at <http://www.trouthout.org>.
- (b) “Marines keep combat rules to themselves”, *Los Angeles Times*, July 11, 2007
- (c) “The Ghosts Of Haditha,” *Time Magazine*, Sunday, Jun. 04, 2006, by Michael Duffy, et al.
- (d) <http://wikileaks.cx/leak/us-iraq-rules-of-engagement.pdf>, info on US Military ROE.

Casualties in Iraq



The problems in this section are not meant to be gruesome. They deal with important national and world issues. Mathematical analysis can help reveal trends, answer questions, as well as raise new questions. The data for this handout is taken from a variety of web sites:

<http://www.ac.wvu.edu/~stephan/USfatalities.html>, publishes a graph showing accumulated U.S. military deaths. Iraq Coalition Casualties, found at <http://icasualties.org/oif/>, collects data on U.S. and allied military fatalities in Iraq. Its sources include the U.S. Dept. of Defense and the British Ministry of Defense.

The above graph is by Ed Stephan, a sociologist at Western Washington University.

Iraqi Casualties

The central issue of Iraqi casualties has been marked by minimal or non-existent record-keeping by the occupying power, the United States. Independent studies have come up with widely varying numbers, including the following:

- (1) Johns Hopkins Univ. study: 600,000 deaths, for dates 2002-2006, published in the British medical journal the Lancet, Oct. 2006.
- (2) Iraqi Health Ministry Study: 151,000 violent deaths out of 400,000 excess deaths due to the war, for dates 2002-2006, published Jan. 31, 2008 in the New England Journal of Medicine.
- (3) Opinion Business Research (an independent polling agency): 1.2 million deaths, published Sep. 14, 2007.
- (4) Iraq Body Count at <http://www.iraqbodycount.org/> publishes data on Iraqi civilian deaths directly attributable to U.S. and allied military action. They list 82,000 to 90,000 as of 4/3/08.

The first three of the studies above use standard polling techniques. However there are numerous controversies, which will be taken up by another workshop in the third session of the conference for which this handout was prepared, **Discounting Iraqi Deaths: A Societal and Educational Scandal** by **Brian Greer & Swapna Mukhopadhyay**, so this handout will focus on other issues.

Critical analyses of the issues surrounding the count of Iraqi Casualties have been published by Counterpunch.org, and others, and the Wikipedia page contains links and references to many of the studies, though the purported "non-partisanship" of sites such as this must be examined critically. JustForeignPolicy at <http://www.justforeignpolicy.org/iraq/iraqdeaths.html> contains a running count based on the Lancet study.

U.S. Casualties

Use the graph on the previous page or the chart on the next page to answer the following questions. The notes on the graph refer to widely publicized statements or events; ask other members of your group if you are not sure what the notes refer to, or click the links at Ed Stephan's site.

(1) President Bush was widely criticized for saying "Bring 'em on!" on July 2, 2003, because this seemed to be an invitation for increased attacks on U.S. soldiers. Do you think the data shows that this occurred? Explain, using what you know about linear functions.

How do you think Bush's statement might have made those, Iraqi or American, who have lost loved ones in the war feel?

(2) Estimate the slope, or rate of change, of the data from March 20, 2003 until April 10, 2003, the initial phase of the war. Please do your calculations "per day" rather than "per month."

What assumptions did you make about the length of a month?) _____
Slope: _____

What are the units of the slope, and what is the meaning of this number in terms of this period?

(3) Use the graph or chart to estimate the rate of change from March 1, 2007 (beginning of the current escalation or "surge") until the present. Rate of change: _____

Then calculate the average rate of change or slope over the entire course of the war.

Rate of change: _____

Describe what you found:

(4) Estimate the number of U.S. fatalities on Nov. 1 of 2008 (just before the presidential election), assuming that fatalities continue to rise in a linear fashion. You may use the graph and estimate or also use the chart below. To do this, you must decide what portion of the graph you will use to determine an appropriate linear function $f(x)$. Your line might not extend "backwards" into 2003 sensibly, if you think the rate of change has changed! Be clear about what your variable x represents.

x represents the number of days since _____

Formula: $f(x) =$ _____

Estimate for Nov. 1, 2008: _____

What assumptions about the data did you make in calculating the rate of change?

What assumptions about the data did you make in creating your linear function?

Describe changes in Iraq that might have led to fewer attacks on U.S. soldiers recently, as well as a recent increase in attacks at the end of March, 2008:

Between Feb. and March of 2007 Bush sent 20,000 more U.S. troops to Iraq. How did deaths of U.S. soldiers in 2007 compare to previous war years?

Source: Iraq Coalition Casualties, found at <http://icasualties.org/oif/>

Period	US fatalities	No. Days	Average = Rate of change = fatality/day	Rate of change of average
Apr-08	1	3		
Mar-08	38	31	1.23	0.23
Feb-08	29	29	1.00	-0.29
Jan-08	40	31	1.29	0.55
Dec-07	23	31	0.74	-0.49
Nov-07	37	30	1.23	0.01
Oct-07	38	31	1.23	-0.94
Sep-07	65	30	2.17	-0.54
Aug-07	84	31	2.71	0.19
Jul-07	78	31	2.52	-0.85
Jun-07	101	30	3.37	-0.70
May-07	126	31	4.06	0.60
Apr-07	104	30	3.47	0.85
Mar-07	81	31	2.61	-0.28
Feb-07	81	28	2.89	0.22
Jan-07	83	31	2.68	-0.94
Dec-06	112	31	3.61	1.28
Nov-06	70	30	2.33	-1.09
Oct-06	106	31	3.42	1.02
Sep-06	72	30	2.40	0.30
Aug-06	65	31	2.10	0.71
Jul-06	43	31	1.39	-0.65
Jun-06	61	30	2.03	-0.19
May-06	69	31	2.23	-0.31
Apr-06	76	30	2.53	1.53
Mar-06	31	31	1.00	-0.96
Feb-06	55	28	1.96	-0.04
Jan-06	62	31	2.00	-0.19
Dec-05	68	31	2.19	-0.61
Nov-05	84	30	2.80	-0.30
Oct-05	96	31	3.10	1.46

Period	US fatalities	No. Days	Average = Rate of change = fatality/day	Rate of change of average
Sep-05	49	30	1.63	-1.11
Aug-05	85	31	2.74	1.00
Jul-05	54	31	1.74	-0.86
Jun-05	78	30	2.60	0.02
May-05	80	31	2.58	0.85
Apr-05	52	30	1.73	0.60
Mar-05	35	31	1.13	-0.94
Feb-05	58	28	2.07	-1.38
Jan-05	107	31	3.45	1.13
Dec-04	72	31	2.32	-2.24
Nov-04	137	30	4.57	2.50
Oct-04	64	31	2.06	-0.60
Sep-04	80	30	2.67	0.54
Aug-04	66	31	2.13	0.39
Jul-04	54	31	1.74	0.34
Jun-04	42	30	1.40	-1.18
May-04	80	31	2.58	-1.95
Apr-04	136	30	4.53	2.86
Mar-04	52	31	1.68	0.99
Feb-04	20	29	0.69	-0.83
Jan-04	47	31	1.52	0.23
Dec-03	40	31	1.29	-1.44
Nov-03	82	30	2.73	1.31
Oct-03	44	31	1.42	0.39
Sep-03	31	30	1.03	-0.10
Aug-03	35	31	1.13	-0.42
Jul-03	48	31	1.55	0.55
Jun-03	30	30	1.00	-0.19
May-03	37	31	1.19	-1.27
Apr-03	74	30	2.47	-2.95
Mar-03	65	12	5.42	5.42
Total	4013	1842	2.18	

(5) Examine the chart above comparing the average rate of total U.S. and allied fatalities per day, for each month. Which month had the highest rate? Which had the lowest? Highest: _____ Lowest: _____
Can you explain this data in terms of what you might know was going on in the war at that period?

(6) Choose one of the figures for civilian deaths on the first page of this section. What daily rate corresponds to these figures?
Show how you calculated it:

What is the corresponding yearly rate, and how do you calculate it?

(7) Assuming this rate continues for the foreseeable future, write a formula giving the accumulated total number of civilian deaths D , since the start of the war, where x represents the number of years beginning on March 20, 2003.

$D =$ _____

(8) Source: Iraq Coalition Casualties, found at <http://icasualties.org/oif/>

Year	U.S. deaths	U.S. wounded	Ratio: wounded/deaths
2003	486	2,415	
2004	850	8,003	
2005	846	5,945	
2006	822	6,402	
2007	901	6,100	
2008	108	449	
Total:	4013	29314	

(8) Calculate the ratio of wounded to deaths and fill in the above chart. What do you notice?

The U.S. Dept. of Veterans Affairs, at <http://www.va.gov/pressrel/amwars01.htm>, shows the total number of American fatalities due to combat and related causes, for the Vietnam War (1964-1975) as 58,198. The number of “non-mortal woundings” is listed as 153,303.

(9) Military historians calculate the ratio of wounded to killed as a measure of the character of a particular war. Calculate these ratios for the Vietnam War and the present Iraq war (use the fatality number of 1966, for Oct. 13, 2005, given in the chart above, for this calculation. You may have to make a choice as to which number to use for U.S. soldiers wounded in Iraq.)

Vietnam ratio = _____

Iraq war ratio = _____

(10) Can you give any possible explanations for the difference?

If the ratio for the Iraq war were the same as that for Vietnam, what would the number of deaths have been at this point in the Iraq War? _____ What does this say about the level of violence of the Iraq War?

(11) What other calculations might it be interesting to do? What other data would it be useful to have? Follow-up: find this data and do the calculations!

The cost of US wars, calculated different ways	Direct Costs	Percent of GDP	Cost Per Capita	Cost per casualty	Calculated population	Calculated Casualties	Calculated population per casualty
	(billions of 2008 dollars)		(2008 dollars)	(millions of 2008 dollars)			
Revolutionary War	\$2.58	63.0	\$526.00	\$0.24			
War of 1812	1.29	13.0	169.74	0.19			
Mexican War	1.88	3.0	89.10	0.11			
Civil War	44.83	84.0	1,596.82	0.11			
Spanish-American War	11.26	3.0	150.94	2.74			
World War I	223.63	24.0	2,175.39	0.7			
World War II	3,398.28	130.0	25,455.28	3.15			
Korean War	394.12	15.0	2,598.02	2.82			
Vietnam War	579.97	12.0	2,830.50	2.74			
Persian Gulf War	89.29	1.0	343.42	105.17			
Iraq War	525.90	0.4	1,729.93	15.11			

Source: Christian Science Monitor, Th. March 20, 2008, By Mark Trumbull

(12) The data above allows us to also calculate the population, total number of casualties, and population per casualty. Do so and fill in the chart.

These calculations may be seen as examples of “related rates” calculus problems. For example, if $\frac{dC}{dP}$ represents the rate of dollars spent per person, and $\frac{dC}{dW}$ represents the rate of dollars spent per casualty, then we may calculate the rate of population per casualty from $\frac{dP}{dW} \cdot \frac{dC}{dP} = \frac{dC}{dW}$ (assuming these are considered continuous functions.) Or we may simply do the calculations using “dimensional analysis” and see that the proper products or quotients give us the data in the columns to the right.

(13) Does the data derived from this chart provide new insights into the current Iraq War? Explain:

(14) Joseph E. Stiglitz and Linda J. Bilmes have written *The Three Billion Dollar War: the True Cost of the Iraq Conflict*, 2008, in which they estimate the final cost of this war as over 3 billion dollars. Recalculate the amounts in the chart above. What can you learn from this?



Depleted Uranium

This page contains a large number of facts about depleted uranium. Please read through before starting the problems on the next page.

The following paragraph is taken from Wikipedia (accessed 4/3/08):

“Depleted uranium (DU) is uranium primarily composed of the isotope uranium-238 (U-238). Natural uranium is about 99.27 percent U-238, 0.72 percent U-235, and 0.0055 percent U-234. Because U-235 is used for fission in nuclear reactors and nuclear weapons, natural uranium is enriched in U-235 by separating the isotopes by mass. The byproduct of enrichment, called depleted uranium or DU, contains less than one third as much U-235 and U-234 as natural uranium, making it less radioactive due to the longer 4.5 billion year half-life of U-238. The external radiation dose from DU is about 60 percent of that from the same mass of natural uranium. DU is used for its very high density of 19.1 g/cm³. Civilian uses include counterweights in aircraft, radiation shielding in medical radiation therapy and industrial radiography equipment, and containers used to transport radioactive materials. Military uses include defensive armor plate and armor-piercing projectiles.”

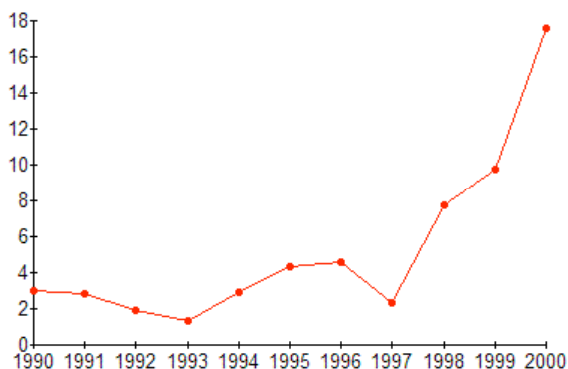
In addition, the half-life of U-235, the only “fissible” (able to cause chain reactions, for example in reactors or bombs) isotope of uranium found in economically usable quantities in nature, is 700 million years. U-234 has a half-life of 246,000 years, which accounts for it occurring in much smaller quantities in naturally occurring uranium.

The World Health Organization reports that, “Most reactors require uranium in which the 235U content is enriched from 0.72% to about 1.5-3%.”

Ramsey Clark reported that in the Persian Gulf War, Between 300 and 800 (metric) tons of DU particles and dust have been scattered over the ground and the water in Kuwait, Saudi Arabia and Iraq. Former presidential candidate Kucinich released a statement on DU charging that 2000 tons of radioactive rubble has been left in Iraq during the current war. The Seattle Post-Intelligencer reported on Aug. 4, 2003, that, “The Pentagon and United Nations estimate that U.S. and British forces used 1,100 to 2,200 tons of armor-piercing shells made of depleted uranium during attacks in Iraq in March and April” (during the first two months of the current war).

“Depleted uranium is the garbage left from producing enriched uranium for nuclear weapons and energy plants. It is 60 percent as radioactive as natural uranium. The United States has an estimated 1.5 billion pounds of it, sitting in hazardous waste storage sites across the country.” “US Soldiers are Sick of It,” Wired, 8/12/06, at <http://www.wired.com/techbiz/media/news/2006/08/71585>. The World Information Service on Energy Uranium Project reported that the U.S. had 480,000 tonnes of DU stocks in 2002.

The blogosphere is rife with rumors of deaths of US service members due to depleted uranium. For example, one account charges 70,000 deaths of Persian Gulf War vets due to DU (4/3/08, see <http://www.agoracosmopolitan.com/home/Frontpage/2008/03/21/02286.html>,)



“The graph to the left shows the rate per 1,000 births of congenital malformations observed at Basra University Hospital, Iraq” (Wikipedia). “The Lancet medical journal in 1998 reported the death rate per 1,000 Iraqi children under five years of age increased from 2.3 in 1989 to 16.6 in 1993, and cases of lymphoblastic leukaemia more than quadrupled. It has been argued, however, that this was caused by the Iraqi Army's use of chemical weapons” <file://localhost/http://www.janes.com>).

Resources on depleted uranium used in this section:

“Weapons of Self-Destruction: Is Gulf War syndrome - possibly caused by Pentagon ammunition - taking its toll on G.I.'s in Iraq?” By David Rose, Vanity Fair, 19 November 2004, available at <http://www.refusingtokill.net/USGulfWar2/weaponsofself.htm>

World Health Organization web page on depleted uranium: <http://www.who.int/mediacentre/factsheets/fs257/en/>

Depleted Uranium Education project maintains a list of links and references at <http://www.iacenter.org/depleted/du.htm>

Ramsey Clark's call to ban depleted uranium munitions: <http://www.converge.org.nz/pma/duban.htm>

Wired magazine article on US soldiers sickened by DU: - “US Soldiers are Sick of It,” Wired, 8/12/06, at <http://www.wired.com/techbiz/media/news/2006/08/71585>

Dennis Kucinich statement on depleted uranium, accessed at http://kucinichonline.com/pdfs/Kucinich_Depleted_Uranium.pdf

“Over 70,000 deaths, and over 1 million disabilities among American soldiers attributed to Iraq Wars says U.S. government data,” blog accusation accessed at <http://www.agoracosmopolitan.com/home/Frontpage/2008/03/21/02286.html>.

Wikipedia page on Depleted Uranium, accessed 4/3/08.