At the Lectern

Using Problems to Teach Quantitative Damages in a First Year Torts Class

Paul Figley

In tort law, success is not measured simply by whether the plaintiff or defendant wins the case, but by the amount of the judgment recovered.[1] Many variables can affect the size of a tort judgment, including broad, policy-based issues such as the collateral source rule,[2] caps on non-economic damages, and limits on punitive damages. But they also include detailed calculations based on life expectancy,[3] work-life expectancy,[4] and the future value of money.[5] When it comes to damages, the devil is in the quantitative details.[6]

Teaching damages to first year students can be problematic.[7] Although students can memorize the pertinent doctrines,[8] such memorization does not

Paul Figley is the Associate Director of the Legal Rhetoric Program at American University's Washington College of Law, where he teaches Legal Writing and Torts. Prior to entering academia, he was a career litigator in the Civil Division of the U.S. Department of Justice where he served as Deputy Director of the Torts Branch for 15 years. The author thanks Joseph Gross for his research assistance.

1. A small judgment, or any judgment against a defendant who lacks the funds to pay it, is of little value to a real world plaintiff. A tort defense attorney would correctly claim a resounding victory if the court awarded a judgment for $2,000,000 when a $10,000,000 judgment had been expected.
2. *See infra* Part 4, Issue 4 (analyzing the collateral source rule).
3. *See infra* Part 4, Issues 1, 3 (calculating future earnings).
4. *Id.*
5. *See infra* Part 4, Issue 2 (analyzing which method to use to account for inflation).
6. *See, e.g.*, Molinari v. City of New York, 672 N.Y.S.2d 662, 663 (App. Div. 1998) (noting that "the devil is in the details" in assessing defendant's five distinct arguments challenging plaintiff's proposed method of calculating future damages).
7. *See* Anthony J. Sebok, Using Comparative Torts Materials to Teach First-Year Torts, 57 J. Legal Educ. 562, 563–64 (2007) (noting that damages should be a consideration at every stage of a torts case, but urging that a first year Torts class should not bog down on evidentiary questions or memorization of state damages rules).
8. *Id.* at 564.

convey a feel for the subject or the practicalities lawyers face in real cases.[9] Indeed, many recent law school graduates who are otherwise generally well versed in tort law do not appreciate the quantitative nature of tort damages.[10] Whatever benefits the Socratic Method may have for beginning law students, it is poorly suited to teaching them practical skills, such as how to use life expectancy tables or calculate the lost future income of a specific person. To master rudimentary skills involving tables and charts, students need to actually use those tables and charts.[11] Well-crafted problems can help students learn and heighten their engagement in the subject matter.[12]

This article suggests centering the damages segment of a first-year Torts class on a special day (or Festival of Damages) when the students serve as advocates, judges, and reporters to discuss and argue specific damages issues. The problem involves three cases and six issues, argued by 12 advocates before six panels of five judges. Every student in the class gets to participate, and belongs to either an advocate team or a judicial panel.

1. Advance Preparation

The Festival of Damages is announced two weeks in advance. I assign reading in the damages chapter of the casebook. I then spend approximately three hours over two classes lecturing about damages and going through the cases and case notes in the reading assignment. This is a straightforward discussion of nominal, compensatory, non-compensatory, and punitive damages; mitigation; the collateral source rule; structured settlements; and judicial review of damages awards.

In the course of the discussion, I introduce the students to two tools widely used by torts practitioners: the Future Damage Calculator and the Present Value Table.[13] While addressing lost future income, future medical expenses, and structured settlements, I explain life expectancy and work-life expectancy. I show how the Future Damage Calculator uses U.S. Department of Labor

9. The Carnegie Foundation report notes the importance of teaching students to think as apprentices engaged in servicing clients rather than as disinterested, competitive scholars. *See* William M. Sullivan, Anne Colby, Judith Welch Wegner, Lloyd Bond & Lee S. Shulman, Educating Lawyers: Preparation for the Profession of Law 188 (Jossey-Bass 2007) [hereinafter Carnegie Report].

10. I base this on my 25 years supervising young attorneys on tort cases at the Department of Justice. *See generally* Harry T. Edwards, The Growing Disjunction Between Legal Education and the Legal Profession, 91 Mich. L. Rev. 34 (1992) (arguing that law schools have abandoned their proper role by emphasizing the theoretical over the practical, and that this shift is creating a gap between what law schools teach and the skills legal practitioners need).

11. *See* Myron Moskovitz, Beyond the Case Method: It's Time to Teach with Problems, 42 J. Legal Educ. 241, 246 (1992) (noting that to master a skill a student must practice the skill).

12. *See id*. at 249–51, 262–63 (recognizing that first year students enjoy working on problems and playing the role of lawyers); *see also* Carnegie Report, *supra* note 9, at 76–77 (noting trend to supplement the case-dialogue teaching method with other techniques).

13. The Future Damage Calculator and Present Value Table I use are combined on flip sides of a two-piece slide chart published by Lawyers and Judges Publishing Co. of Tucson, Arizona.

statistics to predict life expectancy and work-life expectancy (both Years of Remaining Labor Force Participation and Years Remaining until Final Retirement). I circulate copies of the Future Damage Calculator during class. Students enjoy finding their own life expectancies.[14]

I briefly describe the three general methods courts use for addressing inflation: (1) the "inflation-discount method" that requires an expert to calculate inflation and rates of return for future years,[15] (2) the "real interest method" that requires an expert to predict the difference between inflation and interest rates in future years (usually between 1 percent and 3 percent),[16] and (3) the "total offset method" that assumes, as matter of law, that the market interest rate will be totally offset by inflation.[17] I explain how the Present Value Table can be used to calculate the present value of annual payments for a fixed number of years at a particular interest rate, and how this information is relevant to structured settlements.[18]

14. In analyzing life expectancy and work-life expectancy, the tables differentiate by sex and race. Judge Weinstein rejected race-based life expectancy statistics. *See* McMillan v. City of New York, 253 F.R.D. 247, 256 (E.D.N.Y. 2008) ("Reliance on 'race'-based statistics in estimating life expectancy for purposes of calculating damages in this case is rejected in computing life expectancy and damages.").

15. *See, e.g.*, Huddell v. Levin, 537 F.2d 726, 743 (3d Cir. 1976) (allowing expert testimony on inflation rates); Turcotte v. Ford Motor Co., 494 F.2d 173, 186–87 (1st Cir. 1974) (remanding a case for an expert calculation of the decedent's "projected lifetime earnings and expenses [to] be adjusted to reflect future inflation and increases in productivity before the final net earnings figure is reduced to present value."); *see also* Bach v. Penn Cent. Transp. Co., 502 F.2d 1117, 1122 (6th Cir. 1974) (finding particular expert testimony on economic projections to be too speculative, but noting that on remand the jury was not barred from considering the effects of inflation).

16. *See, e.g.*, Doca v. Marina Mercante Nicaraguense, S.A., 634 F.2d 30, 38–40 (2d Cir. 1980) (using a 2 percent rate and noting "[t]here can be no doubt that predicting next year's inflation rate is at least as hazardous a task as forecasting next year's weather"); Feldman v. Allegheny Airlines, Inc., 524 F.2d 384, 387 (2d Cir. 1975) (using a 1.5 percent rate). *See generally* Jones & Laughlin Steel Corp. v. Pfeifer, 462 U.S. 523, 541 (1983) (discussing how courts in other countries treat inflation in calculating damages and noting that some countries used a fixed rate).

17. *See, e.g.*, State v. Guinn, 555 P.2d 530, 545 (Alaska 1976) (citing Beaulieu v. Elliott, 434 P.2d 665, 671 (Alaska 1967) ("The rate of depreciation in the value of the dollar, attributable to ongoing inflation, approximately offsets the financial windfall otherwise attributable to a failure to discount to present value."); Kaczkowski v. Bolubasz, 421 A.2d 1027, 1037 (Pa. 1980) (adopting the total offset approach with some modifications of Alaska's rationale); Friedman v. C & S Car Serv., 527 A.2d 871, 875 (N.J. 1987) (overturning lower court's rejection of the total offset method); Flagtwet v. Smith, 367 N.W.2d 188, 191 (S.D. 1985) (discussing the total offset method and refusing to overturn a case where damages were calculated based on expert testimony in favor of this method).

18. Photocopies of the Future Damages Calculator set at age 24, 42 and 16 are attached in Appendices 1, 3, and 5, respectively. Copies of the Present Value Table set at 35 and 19 years are attached in Appendices 2 and 4.

    Although the students have little background in tax law, they quickly appreciate the advantage of a structured settlement purchased by a defendant that provides a plaintiff with tax-free periodic payments from an annuity compared to taxable interest or periodic

I then spend 15 minutes using the Present Value Table and the Future Damage Calculator to demonstrate the dramatic difference between the results obtained using the "real interest method" and the "total offset method" for a hypothetical injured plaintiff.[19] In the process, I model how to use both tables. I typically let the students pick the age and sex of the injured party. For illustrative purposes here, assume that plaintiff Bob Smith was a 24 year-old white male who earned $100,000 in the year before his death, that he would have earned that amount (plus periodic cost of living increases) for the rest of his career, and that the difference between the rate of inflation and a fair rate of interest is 2.5 percent.

From the Future Damage Calculator we would find Mr. Smith's years of remaining labor force participation to be 35 years.[20] Under the "total offset method," we would roughly calculate the award for his lost future income by multiplying his annual income by his years of remaining labor force participation, resulting in $3,500,000 ($100,000/year x 35 years = $3,500,000). Under the "real interest method," the calculation would be different. Here we are finding the present value (in one lump sum) of the future income he would have earned over the span of years.[21] Using the Future Damage Calculator, we would find the factor for a 2.5 percent difference between interest and inflation for 35 years, which is 23.1452.[22] Following the instructions on the Present Value Table, we would multiply that figure by Mr. Smith's last annual income. The product, $2,314,520, is the present value of his lost future income under the "real interest method" ($100,000 x 23.1452 = $2,314,520).

The students readily see the difference between the amounts from the "total offset method" and the "real interest method." In the Bob Smith example, the amount awarded under the "real interest method" would be roughly two-thirds of the "total offset method" amount, or $1,185,480 less. The students perceive how slight variations in the underlying numbers can dramatically

---

payments from investments purchased by that plaintiff with money from a tort judgment. *See* 26 U.S.C. § 104(a)(2) (addressing the tax treatment of damages). *See generally* Ellen S. Pryor, After the Judgment, 88 Va. L. Rev. 1757, 1770 (2002) (weighing the advantages and disadvantages of structured settlements).

19. Both of these tables are straightforward, self-explanatory and readily understood.

20. *See infra* Appendix 1.

21. Stated another way, we are calculating the lump sum that would be needed to purchase an annuity that would provide periodic monthly payments identical to Bob's monthly, inflation-adjusted income for the rest of his expected work-life.

    An economist would lower the amount a bit more because Bob Smith had an actuarial expectation of working for a total of 35 years during the 37.2 years remaining until his final retirement from the labor force. *See infra* Appendix 1, average Number of Years Remaining until Final Retirement from the Labor Force. Spreading the 35 years of income over 37.2 years would lower the value because interest would compound over another 2.2 years. I briefly note this point for the students.

22. This factor comes from the Present Value Table for 35 years. *See infra* Appendix 2.

alter the size of the judgment. Most of them recognize that they are capable of using the Future Damage Calculator and the Present Value Table.

2. Procedures and the Problems

When the Festival of Damages is announced the students receive the problems, their arbitrary assignments to either an advocacy team or judicial panel, and pertinent copies of the Future Damage Calculator and the Present Value Table. Each litigation team prepares a two-page brief in which it may cite one case in addition to cases identified in the casebook. Each team chooses one person to argue. Two days before the event, the briefs are distributed to all class members, each of whom is responsible for reading the briefs and preparing a two-minute summary of the issues in each of the five arguments other than the student's own. Here is the handout:

The Festival of Damages

You will each be involved in a classroom argument on damages. Six panels of the Grossmanohoma[23] Court of Appeals are considering three cases involving six issues.[24] Each issue will be argued before a separate five-judge panel.

Each of you will be on either a litigation team or a judicial panel. Each litigation team must meet as a group at least twice before the argument and prepare a two-page brief which may cite one case in addition to the authority in the casebook. The team will select one person to argue. The briefs will be emailed to opposing counsel and [the Teaching Assistant[25]] by 7:00 p.m. on the due date. They will then be posted on our class webpage and read by all class members.

All judicial panel members will meet as a group with me. Each judicial panel will then meet once by itself on the day before the arguments.

Because an attorney or judge should never miss an opportunity to educate the public (or, if need be, appear on television), each of you should be prepared to give a two minute summary of the issues prior to the beginning of each argument. Before each argument one of you will be randomly selected to provide that introduction to the class and any visiting dignitaries. So, you should read and absorb all 12 briefs. This will also help you prepare for questions on the final that <u>will</u> be taken from this exercise. If your name is called for the issue you were assigned you

23. A fictional state named for our dean, Claudio Grossman.

24. The procedural framework does require a willing suspension of disbelief. The appellate setting is unrealistic because there are no trial records or lower court rulings. This logical inconsistency has not created any problems with the exercise.

25. During the Festival my teaching assistant serves as timekeeper for the arguments and randomly draws names of students to summarize the upcoming argument, roles that could readily be filled by students who are not serving as an advocate or judge.

will not present the two minute summary on that issue and your name will be returned to the pool.

Arguments will be five minutes per side, with no rebuttal. The plaintiffs will go first in each argument. At the conclusion of all the arguments there will be a 15-minute break during which the judicial panels will reach their decisions. The judicial panels will then return and announce their decisions. One person will argue for each team.

Meeting of all Judicial Panel Members:	Weds., 10/26, 1:00 p.m.
Briefs due:	Thurs., 10/27, 6:00 p.m.
Day of Arguments:	Mon., 10/31, 11:00 a.m.

Holiday v. Arvis Escalator Co.

This is a wrongful death action in which a 42-year old, white male dentist was killed in a tragic escalator accident on 1/6/12. His reported income was $144,000 for 2009, $146,500 for 2010, and $148,500 for 2011. Liability has been resolved in favor of plaintiff.

Issue 1. What is the value of Dr. Holiday's lost future income without regard to inflation?

The answer will be a single dollar amount. The judicial panel will show how it reached that number.

Issue 2. How will the courts of Grossmanohoma account for inflation in assessing damages?

The three possible answers are: the "inflation-discount method," the "real interest method" or the "total offset method." The judicial panel will explain its decision.

Sydney v. Harris.

This is a wrongful death case in which Muriel Sydney, a 16-year old, white female high school sophomore, was killed in an auto accident on 1/23/11 in which she was run over by a drunken young man on his way home from a high school basketball game. She suffered severe brain injuries and was conscious for only ten days prior to her death on 2/13/11.

Ms. Sydney's parents were originally billed $200,000 for all medical care arising from the accident. The family's insurance paid $50,000. One of the surgeons reduced her bill from $20,000 to $4000 when she learned that the accident occurred immediately after the drunken driver had left the basketball game in which the surgeon's son had scored 23 points.

Ms. Sydney was an average student in an average high school. Half of her classmates will graduate from college; 10 percent of those will receive post-graduate degrees. She planned to become a dentist. The average dentist in Grossmanohoma earns $140,000 per year; the average college graduate, $100,000; and the average high school graduate, $50,000. Liability has been resolved in favor of plaintiff.

Issue 3. What is the value of Ms. Sydney's lost future income without regard to inflation?

The answer will be a single dollar amount. The judicial panel will show how it reached that number.

Issue 4. Will Grossmanohoma abandon the collateral source rule?

The answer will be a single dollar amount showing the amount to be paid for Muriel's medical expenses. The judicial panel will show how it reached that number and explain the Grossmanohoma rule on collateral sources.

Issue 5. What is the value of Ms. Sydney's pain and suffering and loss of enjoyment of life?

The answer will be a single dollar amount. The judicial panel will show how it reached that number.

Dollar v. Rick's Café, Inc.

This is a wrongful death case arising from the demise of John Dollar, a 33-year old insurance investigator and father of three. He was killed when a bouncer literally threw him out of a bar, fracturing his skull. The bouncer, Joe Perkins, had three prior convictions for criminal battery, one while working at Rick's. Rick's, which owns 50 bars across the country, has a written policy against physical violence but, as demonstrated at trial, rarely conducts training for bouncers or inspections of bouncers' methods or histories. It has never disciplined a bouncer for physical violence. The jury awarded $1,000,000 in compensatory damages and $12,000,000 in punitive damages. No Grossmanohoma state constitutional provision or statute addresses punitive damages.

Issue 6. Is there a limit on punitive damages in Grossmanohoma; if so, what is it?

The answer will state the limit on punitive damages (a dollar amount, a percentage or multiple of compensatory or pecuniary damages, or other), if there is one, and will state a single dollar amount of the final punitive damages award to Ms. Blake's estate. The judicial panel will show how it reached its conclusion.

	Plaintiff's Attorneys	**Defendant's Attorneys**	**Judges**
	[Names]	[Names]	[Names]
Issue 1			
Issue 2			
Issue 3			
Issue 4			
Issue 5			
Issue 6			

Several days prior to the arguments, I meet with the judicial panels to organize the arguments. This meeting provides an opportunity to set the ground rules and to insure that the judges understand the issues and cases well enough to ask incisive questions. In addition to the normal rules about time and decorum, the judges are instructed that each of them must ask at least one question of each advocate and may not ask more than three questions of any advocate. The latter rule serves to reduce the potential for one judge to tie up an entire argument. I tell the students these are secret instructions, not to be shared with non-judges until after the arguments.[26] Finally, the panel members are informed that they are expected to produce a written opinion.

3. Argument Day

I devote an entire class session to the Festival.[27] The room is arranged to resemble an appellate court. Advocates and judges wear courtroom attire. Knowing that this class is categorically different, students arrive in a happy, expectant mood.

Before each argument a student is chosen at random to give a two-minute summary of the issues that will be presented. The fiction is that a roving reporter has asked the student to comment for a live television audience. This requirement insures that the students read and absorb all the briefs, not just the two for their assigned issue. Presentation of the summary serves to fill time between arguments while the advocates and judicial panel take their seats.

Arguments are five minutes per side, with no rebuttal. The plaintiffs go first in each argument. At the conclusion of all the arguments there is a 15-minute break during which the judicial panels retire and deliberate. The judicial panels then return and announce their opinions. After a short recap of the day's events, class is dismissed. The panels' written decisions (and any dissents) are then posted.

4. Analyzing the Issues

Issue 1: What is the value of Dr. Holiday's lost future income without regard to inflation?

This is a fairly straightforward problem. Dr. Holiday's lost future income is the sum of what he would have earned in each of the years he would have worked had he not been killed on January 6, 2012, at age 42. This involves two subsidiary questions:

- How many years would he have worked?
- What would he have earned each year he worked?

Resolution of the first question requires use of life expectancy tables on the Future Damage Calculator. The tables show that a white male, age 42,

26. In the five years I have staged the Festival I have not received a complaint about this instruction or seen any suggestion that the secret was revealed prematurely.

27. At American University's Washington College of Law, Torts is a four-hour, one-semester class. My class lasts one hour and 50 minutes.

has a life expectancy of 35.1 more years and that he will actively participate in the workforce for another 19.1 years and then retire.[28] So, Dr. Holiday had an expectation of working 19.1 more years and finally retiring at age 61.1.

Resolution of the second question begins from the data available. Dr. Holiday's reported income was: $144,000 for 2009, $146,500 for 2010, and $148,500 for 2011. Students can argue whether the income is increasing geometrically, arithmetically, or in some other fashion.

Dr. Holiday's lost future income equals what he would have earned in each year between 2012 and his expected retirement in 2031.

2012 income
2013 income
*
*
*
+ 2031 income
Lost Future Income

The key debate will be about how Dr. Holiday's income would have changed from year to year. The argument will likely involve speculation and calculations by both sides on matters such as the dentist's productivity, his approaching retirement, and the economic climate.

Issue 2: How should the courts of Grossmanohoma account for inflation in assessing damages?

The three possible answers are: the "inflation-discount method," the "real interest method;" or the "total offset method."

This is a question of law to be argued from case law, logic, and policy. Plaintiffs will likely push for the "total offset method" because it will maximize the recovery. Defendants may argue for either the "real interest method" because of the current low interest rates, or the "inflation-discount method." Both methods would require some discounting to present value. The absence of any expert testimony in the problem would make the "inflation-discount method" difficult for the panel to apply.

The consequences of the decision are substantial. Assuming Dr. Holiday would have earned $150,000 annually for 19.1 years, under the "total offset method" the award for lost future income would be $2,865,000 ($150,000/year x 19.1 years = $2,865,000). Under the "real interest method," and assuming a difference of 2 percent between the rate of inflation and a fair rate of interest, the award for lost future income would be $2,246,835 ($150,000 x 15.6785[29] =

28. *See infra* Appendix 3. It is not typical for the expectancy of years of active workforce participation to be the same as the expectancy of years until final retirement. Dr. Holiday's age was picked to take advantage of the coincident that they are same for that age. This simplifies the problem by reducing the variables for the students to take into account.

29. From the Present Value Table for 19 years and 2 percent. *See infra* Appendix 4.

$2,246,835). The difference is $618,165 or 21.5 percent.[30] The size of an award under the "inflation-discount method" would depend on the expert testimony about future inflation and future interest.

Issue 3: What is the value of Ms. Sydney's lost future income without regard to inflation?

This is a simply stated but difficult problem: what would a high school sophomore have earned in each of the years she would have worked had she not been killed on January 23, 2011. Consider that she may have wanted to be a dentist and was an average student at a high school from which half of the graduates achieved college degrees and 10 percent achieved professional degrees. Determining Ms. Sydney's lost future income involves the same two subsidiary questions as for Dr. Holiday:

- How many years would she have worked?
- What would she have earned each year she worked?

Calculating Ms. Sydney's work-life expectancy is straightforward. The tables show that a white female, age 16, has a life expectancy of 64.5 more years, she would have actively participated in the workforce for another 30.3 years, and would have finally retired from the workforce 44.5 years after entering it.[31] The problem also states that the average Grossmanohoma dentist earns $140,000 per year; the average college graduate, $100,000; and the average high school graduate, $50,000.

Calculating Ms. Sydney's future annual earnings is a complicated problem. There is no certainty about whether she would become a dentist or even a college graduate, so we do not know the level of her peak earnings. Nor do we know how many years of labor force participation she would have had at her highest earning level (dentist or college graduate), as opposed to labor force participation at lower-paying positions while a student (waitress or teaching assistant). Her earning potential would have changed if she graduated from college or dental school, as would her stream of income if she had worked while going to school.

Her lost future income equals what she would have earned in each year she worked from the time she began employment and her expected retirement some 44 years later.

30. Because this Present Value Table includes only whole years, a more accurate comparison would round the work-life expectancy for the "total offset method" to 19 years. That would result in a "total offset method" lost future income of $2,850,000. The difference between that and the "real interest method" figure of $2,246,835 is $603,165, or about 21 percent.

31. *See infra* Appendix 5.

2013 (?) income (as high school graduate)
2017 (?) income (increases if college graduate)
2020 (?) income (increases if Dental School graduate)
*
*
*
2056 income
+ 2057(?) income
Lost Future Income

If we knew her education level, damages could be calculated in simplest terms as:

If a dentist, 30.3 years at $140,000/year = $4,242,000

If a college graduate 30.3 years at $100,000/year = $3,030,000

If a high school graduate, 30.3 years at $50,000/year = $1,515,000

Plaintiff's counsel will likely argue that Ms. Sydney should be treated as though she would become a dentist and should be compensated accordingly. They will likely argue that she would have earned $140,000 per year for 30.3 years. They may argue for some calculation that takes into account the uncertainty of dental school graduation, but skews the analysis towards a higher award than simply averaging the probabilities and expected earning Defense counsel will likely argue that Ms. Sydney probably would not have graduated from dental school, and her earnings would be between those of a high school and a college graduate. Additional possible defense arguments include: (1) any award should take into account the likelihood that she would not have graduated from college or dental school; (2) assuming she did graduate from college or dental school, she would have worked during her education and, therefore, would not have spent 30.3 years working in her final position; (3) the value of lost future income is the income itself minus the cost of education, so the cost of her education should be subtracted from her gross earnings.

Issue 4: Will Grossmanohoma abandon the collateral source rule?

This is a direct question for the judicial panel to resolve as a matter of state law. If applicable, the collateral source rule would apply to keep the surgeon's $16,000 fee reduction from being subtracted from the plaintiff's compensatory damages.[32] The advocates will argue on both policy and legal grounds for continuation or abandonment of the rule.

32. Restatement (Second) of Torts § 920A (1979) states:

> (1) A payment made by a tortfeasor or by a person acting for him to a person whom he has injured is credited against his tort liability, as are payments made by another who is, or believes he is, subject to the same tort liability.
> (2) Payments made to or benefits conferred on the injured party from other sources are not credited against the tortfeasor's liability, although they cover all or a part of the harm for which the tortfeasor is liable.

Issue 5: What is the value of Ms. Sydney's pain and suffering and loss of enjoyment of life?

This is an area where fact-finders have very broad discretion. Advocates will make appeals to experience, logic, and policy on what compensates for ten days of pain in a hospital setting for a fatal head injury, and for a 16-year old girl's loss of a lifetime of enjoyment. Students will likely be frustrated as they struggle to find an effective argument grounded in the law. They will try to analogize to the cases in the casebook. Because they may cite one additional case, they will try to find one that closely matches the facts and gives either a very high or very low award. It is likely that the judicial panel will be unsatisfied with either side's arguments and will award a value somewhere in between.

Issue 6: Is there a limit on punitive damages in Grossmanohoma; if so, what is it?

This is a direct question for the judicial panel to resolve as a matter of state law. Arguments may be based on constitutional or policy grounds. Plaintiff's attorneys may argue that state law should not constrain punitive damages beyond the limitations required by the Constitution.[33] Defendant's attorneys will likely argue that the panel should accept the one-to-one ratio of compensatory damages to punitive damages adopted by the Supreme Court for federal maritime law.[34]

5. Teaching Considerations

The primary goals of the exercise are to help first year Torts students learn to approach tort damages in a quantitative way, to have some familiarity with life expectancy tables and future value tables, and to begin to integrate their substantive knowledge of tort law in a practical, practice-oriented context.[35] Secondary goals are to encourage collaborative thinking and writing, and to foster development of advocacy skills during the first law school semester.

Each student must prepare a two-minute summary of the five arguments for which the student had no responsibility. These two-minute summaries constitute a key part of the lesson. The students know that parts of their final

Comment c(3) to § 920A specifically addresses doctors' reduced fees: "[T]he fact that the doctor did not charge for his services . . . does not prevent [plaintiff's] recovery for the reasonable value of the services."

33. *See* State Farm Mut. Auto. Ins. Co. v. Campbell, 538 U.S. 408, 425 (2003) (declining "to impose a bright-line ratio" for punitive damages, but noting that "in practice, few awards exceeding a single-digit ratio . . . will satisfy due process"); BMW of N. Am., Inc. v. Gore, 517 U.S. 559, 568 (1996) (holding that "grossly excessive" punitive damage awards violate the Due Process clause of the Fourteenth Amendment).

34. *See* Exxon Shipping Co. v. Baker, 554 U.S. 471, 502, 515 (2008) (noting, "[o]ur review of punitive damages today . . . considers not their intersection with the Constitution, but the desirability of regulating them as a common law remedy for which responsibility lies with this Court as a source of judge-made law in the absence of statute," and adopting "[a] punitive-to-compensatory ratio of 1:1" as the maximum under federal maritime law).

35. *See* Carnegie Report, *supra* note 9, at 79 (discussing the importance of teaching practical skills to law students).

exam will be taken from material covered during the arguments. They know that they may be asked about life expectancy, work-life expectancy, future income, annuities, the future value of money, the collateral source rule, punitive damages, and the various approaches the law uses to deal with inflation.[36] The two-minute summaries address each of these issues in the context of a readily understood fact situation.[37] Having studied the briefs at least enough to summarize them, the students gain sufficient knowledge to intelligently follow the oral arguments, critically read the opinions, and understand the final discussion that integrates the damages segment of the class.

In the class session following the Festival of Damages, we briefly discuss the panels' opinions. We then turn to the broad lessons learned. The issues involving lost future income, inflation, and pain and suffering/loss of enjoyment of life each involve quantitative analysis that the students can understand. These issues also demonstrate how damages issues range from the relatively simple and to the very complicated. For example:

- The issue of lost future income for Dr. Holiday is confined to finding different ways of calculating the year-to-year changes in his income.
- Ms. Sydney's lost future income is, by comparison, incredibly complex. Should the court credit her plan to become a dentist, even though only one in 20 of the students in her high school will earn a post-graduate degree? Should the defendant benefit from the 50-50 likelihood that she would not earn a college degree, even though his drunkenness ended her life? If she is credited with a college or professional degree, how much of her employment will be compensated at the highest rate? Should deductions be made for the cost of her higher education?
- The intellectually challenging problem of accounting for interest and inflation can have a significant effect on the damages awarded. Although the legal rule adopted will be simply stated, the calculations themselves are likely to be very complicated.

36. I assure them that all necessary information will be provided and no "hard" math will be required. The point is to understand key concepts rather than to memorize particular numbers or formulae.

37. I have experimented, somewhat successfully, with grading the two-minute presentations of the six randomly chosen students. On those occasions the handout includes a sentence stating, "As an added incentive, based on the quality of your summary you can earn up to ½ percent or lose up to ½ percent on your final grade for the course." Usually my exams are 300 points, so I typically award up to 1½ points for successful presentations. To date I have not had to reduce a score. Obviously, on a rational level this is a very small incentive, but it seems to have improved the efforts of some students. My experience with the extra-credit may be colored by the nature of grades at American University's Washington College of Law. We use traditional letter grades and do not have a mandatory curve. Under other grading systems possible complaints about perceived unfairness in giving randomly chosen students the opportunity for extra credit may outweigh the positive impact of grading the presentations.

- Awards for pain and suffering and loss of enjoyment of life will not be guided much by legal rules. Arguments on these issues will be much more freewheeling and unrestricted than on the other issues.

The issues involving the collateral source rule and punitive damages are categorically different from the others. These are straightforward, non-quantitative legal issues that might be handled by lecture or the Socratic Method. I include them in the Festival to control the size of the advocacy teams and judicial panels and meet the Festival's secondary goals. Teams of three to five advocates seem to be the best size to insure engagement and participation by all members. Judicial panels of five judges have been more effective than panels of three. The six issues presented here would be appropriate for classes of between 66 and 90 students. In smaller classes, I would drop one or both of the latter issues from the exercise.

Using this structure, I spend around five hours of precious class time teaching damages.[38] Those torts professors who allot less time to damages can readily use the Festival approach in only three hours. One classroom session could include an hour covering damages law, 15 minutes explaining the Future Damage Calculator and the Present Value Table, and five minutes announcing the Festival and the student assignments. In a later class,[39] the arguments could be held in an hour and 25 minutes. Judicial opinions could be emailed to the class that night or the next day. Discussion of the judicial opinions and a final wrap up could be completed in 15 minutes at the beginning of the following class.

6. Student Response

The exercise has proven successful in teaching students about life expectancy, work-life expectancy, and how to use a life expectancy table. The students acquire a general understanding of Present Value Tables, the effects of interest, inflation, and future discounting on damage awards, and how the courts may resolve such issues. They also develop an understanding for the sorts of arguments that may increase or reduce awards for non-economic damages.

By working through these issues together, listening to each other's arguments, and preparing their two-minute summaries of the five arguments assigned to others the students learn material that is difficult to teach by lecture or the Socratic Method. They readily perceive that it is easier to calculate the lost future income of an established adult than that of a child. They see the problems and advantages of the different methods of accounting for inflation. They deal first-hand with the subjective nature of non-economic damages. They are wholly engaged in the problem and their roles as advocates or judges.

38. At the Washington College of Law, Torts is a four-hour, one-semester class, allowing for about 56 hours of classroom time.

39. Students need at least a week to prepare their two-page briefs and oral arguments.

The Festival does require different levels of effort from some students, but to date those with the greater burden have not voiced objections. Indeed, they have embraced the opportunity to do more. For example, while each member of an advocacy team is responsible for helping to draft the team's brief, one of them will have additional responsibility for the oral argument. Frequently, more than one team member wants to argue, a problem I let them sort out by themselves. Likewise, while students on judicial panels must render a joint written opinion, individual panel members often take on the additional burden of writing their own dissents or concurrences. This may reflect their eagerness to have a lawyer-like experience and to show their peers what they can do. Although the problems involve varying levels of theoretical complexity, the teams seem to spend about the same amount of time working on their briefs and opinions. No one has ever complained that their issue was unfairly complicated compared to the others, perhaps because they know that they will each be expected to understand the issues and arguments in all the problems.

The quality of their work has been high. The briefs, usually the students' first attempt at written advocacy, make up for their brevity and lack of polish with fervor and creativity. The oral arguments are generally very well presented. Judicial questioning is usually on point and appropriate. Students in the audience pay close, polite attention to every word, perhaps because this is the first time they are hearing arguments on legal topics they have researched and prepared. Panel opinions are received with interest and respect.

My students thoroughly enjoy the exercise. Their informal comments and end of semester evaluations describe the Festival as a memorable, fun event that proved helpful to their overall understanding of damages.[40] I believe the Festival gives them a solid grounding in the quantitative aspects of tort damages.

40. "The Festival of Damages was an excellent teaching tool" (2012 Evaluation); "The Festival of Damages was an excellent idea. It made it much more understandable" (2011 Evaluation); "The 'Damages Festival' in class oral argument was very insightful/helpful in understanding tort damages" (2010 Evaluation); "I especially loved the Festival of Damages" (2009 Evaluation); "Festival of Damages was incredibly fun" (2008 Evaluation) (on file with author).

Appendix 1: Future Damages Calculator set for age 24

FUTURE DAMAGE CALCULATOR

Use This Side for Determining Life and Work Expectancy
Use Other Side to Determine Present Value of Payments

AGE	LIFE EXPECTANCY	WORKLIFE EXPECTANCY
24	MALE | FEMALE 51.8 | 56.8 WHITE MALE | FEMALE 46.1 | 52.3 BLACK MALE | FEMALE 51.3 | 56.4 TOTAL POPULATION	AVERAGE NUMBER OF REMAINING YEARS OF LABOR FORCE PARTICIPATION MALE | FEMALE 35.0 | 25.5 WHITE MALE | FEMALE 29.7 | 24.9 ALL OTHERS MALE | FEMALE 37.2 | 36.4 WHITE MALE | FEMALE 34.8 | 36.6 ALL OTHERS AVERAGE NUMBER OF YEARS REMAINING UNTIL FINAL RETIREMENT FROM THE LABOR FORCE

LIFE EXPECTANCY

The data for this section is extracted from the National Center for Health Statistics. Anderson RN. United States Life Tables, 1999. National Vital Statistics Reports; vol 47. Hyattsville, Maryland: National Center for Health Statistics, 2001. Bureau of the Census, Demographic Statistical Methods Division life tables. The Life Expectancy "All Others" category has been replaced by "Total Population" because data for "All Others" is no longer published.

WORKLIFE EXPECTANCY

The average number of remaining years of labor force participation show the remaining number of years an individual is expected to be in the labor force. It should be used to provide a measure of the number of years the individual would have actually worked prior to final retirement.

The average number of years until retirement from the labor force includes the number of years an individual is expected to be in the labor force plus periods of inactivity during the working years prior to final retirement. It should be used to provide a measure of a worker's earning capacity-that is potential earnings if he or she were to have been employed on an ongoing basis until final retirement.

Worklife duration figures were obtained from the U.S. Dept. of Labor, Bureau of Labor Statistics, Bulletin 2254, "Worklife Estimates: Effects of Race and Education," 1986, (based on data from 1979 and 1980), author Shirley J. Smith, Demographic Statistician in the Bureau of Labor Statistics. Facsimile available from Lawyers & Judges Publishing, catalog #2254.

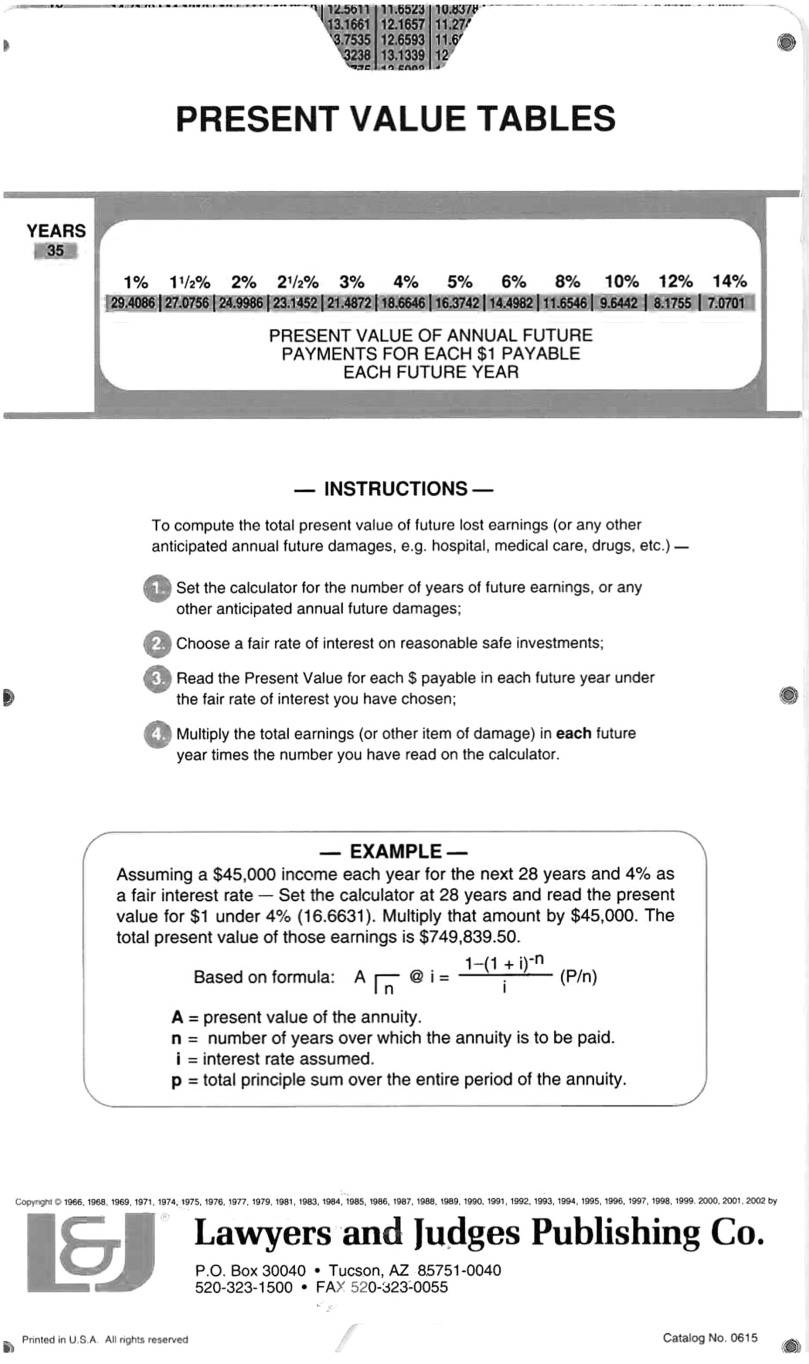
Data on average number of years until final retirement from the labor force has been reprinted from "The Use of Worklife Tables in Estimates of Lost Earning Capacity," *Monthly Labor Review,* U.S. Dept. of Labor, April, 1983, author David M. Nelson, Associate Professor of Economics, Western Washington University, Bellingham, WA 98225. The data was extracted from U.S. Department of Labor, Bureau of Labor Statistics, as of February 1985.

After finding the applicable "Expectancy," you can determine the present value of future payments over that number of years **by using the other side of this calculator (Present Value Tables).**

"Present Value" means an amount which could be invested at an assumed interest rate so as to permit fixed equal payments to be withdrawn each year over a specified number of years, and fully exhaust the amount invested and all interest earned at the end of that period of years. It might also be described as the cost of an annuity for a specified number of years of equal annual payments with an assumed interest rate.

A new updated version of this calculator, catalog #0615, is published and available each year from Lawyers & Judges Publishing Company. Also available from Lawyers & Judges Publishing Company is *Life and Worklife Expectancies* by Hugh Richards, catalog #5368, a book which, in addition to extensive life expectancy tables by education and smoking status, contains new and updated worklife expectancy tables by sex, race, Hispanic origin, education, smoking status, and occupation.

Appendix 2: Present Value Table set at 35 years



12.5611 | 11.6523 | 10.8378
13.1661 | 12.1657 | 11.27
3.7535 | 12.6593 | 11.6
3238 | 13.1339 | 12

PRESENT VALUE TABLES

YEARS
35

1%	1½%	2%	2½%	3%	4%	5%	6%	8%	10%	12%	14%
29.4086	27.0756	24.9986	23.1452	21.4872	18.6646	16.3742	14.4982	11.6546	9.6442	8.1755	7.0701

PRESENT VALUE OF ANNUAL FUTURE
PAYMENTS FOR EACH $1 PAYABLE
EACH FUTURE YEAR

— INSTRUCTIONS —

To compute the total present value of future lost earnings (or any other anticipated annual future damages, e.g. hospital, medical care, drugs, etc.) —

1. Set the calculator for the number of years of future earnings, or any other anticipated annual future damages;
2. Choose a fair rate of interest on reasonable safe investments;
3. Read the Present Value for each $ payable in each future year under the fair rate of interest you have chosen;
4. Multiply the total earnings (or other item of damage) in **each** future year times the number you have read on the calculator.

— EXAMPLE —

Assuming a $45,000 income each year for the next 28 years and 4% as a fair interest rate — Set the calculator at 28 years and read the present value for $1 under 4% (16.6631). Multiply that amount by $45,000. The total present value of those earnings is $749,839.50.

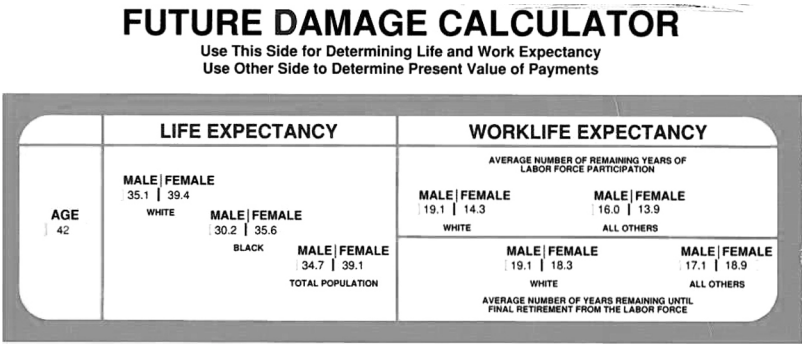
Based on formula: $A \overline{\lceil}_{n} @\ i = \frac{1-(1+i)^{-n}}{i}$ (P/n)

A = present value of the annuity.
n = number of years over which the annuity is to be paid.
i = interest rate assumed.
p = total principle sum over the entire period of the annuity.

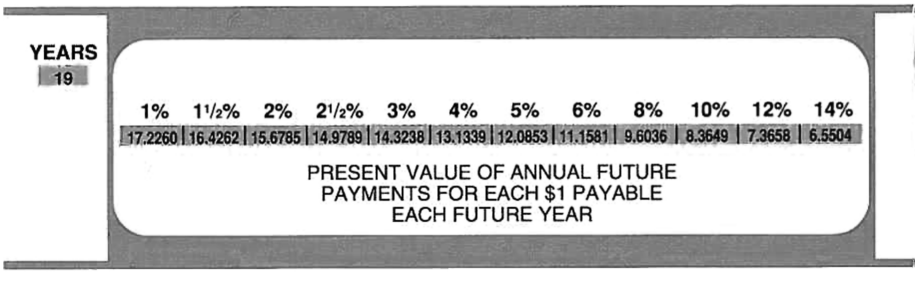
Lawyers and Judges Publishing Co.
P.O. Box 30040 • Tucson, AZ 85751-0040
520-323-1500 • FAX 520-323-0055

Catalog No. 0615

Appendix 3: Future Damages Calculator set for age 42



Appendix 4: Present Value Table set at 19 years



Appendix 5: Future Damages Calculator set for age 16