Chapter 1

Overview

1.1. Why Use Formulas?

What’s the value of a human life, a broken marriage, a stolen copyright, a contaminated water system, or a sexually harassed office worker? How much is the case worth?

And . . .

Should we take the case? Should we settle now or hold out longer? Will it be worth more or less if we delay settlement negotiations? If we go to trial, what offsets or enhancements should the judgment include? When, if ever, will the business break even?

All of these questions have answers. They are answers that can be expressed in mathematical terms and then used to calculate damages. In some cases, these answers can be established scientifically using precise formulas that are universally accepted among financial and accounting experts. In other cases, the answers can be deduced from formulas that provide insight and guidance, if not scientific certainty, about a particular case.

For some lawyers, the most basic tools—averaging, compounding interest, determining probabilities—will prove tremendously helpful in evaluating the strength of a case, or positioning oneself for settlement talks or mediation sessions. For others, the more advanced devices, such as calculating the compound annual growth rate or using a debt-to-equity ratio, may accelerate settlement discussions or assist the trier of fact in fixing damages in a particular case.
While there are many reasons why formulas are helpful, there are also many reasons why they are necessary. At the outset, formulas can guide lawyers and law firms toward making important *intake* decisions:

1. Should we take the case? Will the cost justify the expense?
2. What kind of retainer agreement should we offer the client in view of the projected value of the case?
3. How extensive/expensive will the pretrial discovery process be, in order for us to gather the information necessary to apply a particular formula?

Formulas can also assist lawyers in determining whether to resolve a case informally before filing suit or going to trial:

1. Will the cost of litigation substantially erode the value of the case?
2. Is the evidence necessary to prove a particular formula admissible in this particular court, or should we apply our formulas outside of court, as a negotiating device only?
3. How long will litigation take? Will the time value of money reduce the ultimate benefit to be achieved?

Formulas can tell a lawyer what pretrial discovery to conduct, which questions to ask, and which documents to demand in production prior to trial. For example, in a wrongful death action, the court will want to see admissible evidence of the decedent’s work expectancy. Thus, it may be necessary to obtain proper work expectancy tables from a reliable government source, and to determine whether the court can take judicial notice of such records. In a real estate case, it may be necessary to obtain architectural plans, appraisals, land use regulations, site plans, termite reports, leases, loans, escrow and closing documents, and title reports, some or all of which may provide the raw data necessary to run the formulas.

Formulas can also provide a necessary platform for demanding a settlement figure or rejecting such a demand. They may channel the course of negotiations in a mediation or a judicially supervised settlement conference. In a complex divorce case, for example, formulas
will allow the attorney to calculate quickly the cash flow to a dependent spouse, to offer alternatives to permanent alimony, and to demand the proper amount of life insurance coverage. In an employment discrimination case, the attorney will be able to apply appropriate formulas to demand the proper damages for lost benefits, bonuses, and salary upgrades.

In smaller cases, which do not justify the retention of expensive expert witnesses, knowing how to use formulas strategically can boost the value of the case and provide a defense against arbitrary and baseless offers and demands.

Perhaps the most important reason to use formulas is to conduct one’s representation ethically and thoroughly. By documenting the efforts to valuate a case, a loss, a business transaction, or other event, attorneys can demonstrate their due diligence. They can apply math and science to a process that is often aimless or misdirected. Formulas may, in fact, keep lawyers out of trouble by helping them to prove the positions they’ve taken and the recommendations they’ve made to clients.

1.2. How to Use Formulas

The first rule of using formulas is to use them secretly—that is, privately—until you know the results. In most cases, attorneys are not required to apply particular formulas to a damages calculation. In fact, negotiations often proceed quite unscientifically: plaintiff makes a high demand, defendant counters with a low offer, followed by a more realistic demand, then a more realistic offer, and so forth. In many law firms, the valuation of a case may be tied to the latest jury verdict research showing the amounts that juries awarded in other, similar cases. Such research is not always comparable or realistic. Other law firms keep track of trends in their local courthouses, developing a settlement range in particular cases that is consistent with the history of juries in their particular locales. All of these approaches are acceptable, but none of them should be considered exclusively.

Formulas can be used both as private decision-making tools (privileged attorney work product) and as published negotiating or litigating tools. They should never be used arbitrarily or haphazardly. They should not be overused, or used too hastily, or without sufficient determination of the underlying figures. Where the circumstances are
highly complex, or the positions asserted require specialized expertise and experience, attorneys should engage financial experts to explain and justify the use of a particular formula.

As a private decision-making tool, the formulas provided in this book supply a reference guide for problem-solving and analytical measurement. Attorneys should explore the formulas, the ratios, the shortcuts, and other techniques discussed in these pages as part of the early case work-up and brainstorming process. Running the numbers through a few different formulas, and hypothesizing about how the evidence might alter the results, can focus the case acutely on the target issues and the primary discovery questions that lie ahead. Applying the formulas can also tell attorneys what the client or the adversary is worth: simple net-worth calculations or turnover ratios can offer immediate clues about the financial stability of an individual or a business entity.

Formulas should be used to avoid “shooting from the hip.” Settlement offers pitched in the hallway of a courthouse or in the caucus of a mediation session should not be plucked out of thin air. Rather, they should be calculated on a calculator, scratched out on a notepad, and identified as a particular formula—a net present value, a periodic interest rate, a multiple event probability, or a price-to-earnings ratio, as the case may be. By using formulas to fix a more precise monetary amount, attorneys can simultaneously argue their positions mathematically, justify their demands or defenses ethically, and professionalize the negotiating process.

Plaintiffs’ attorneys who deal with difficult insurance carriers may find that formulas can help them settle a case for policy limits rather than superficially threatening bad faith litigation. Indeed, rather than dispatching boilerplate letters to insurance companies warning them of the risk of a bad faith claim, attorneys can lay out formulaic calculations to explain why tendering the policy limits would be highly justified in the circumstances. Such letters are likely to be treated as far more persuasive than the boilerplate warning letters used by some attorneys.

Formulas should not be used, however, whenever they will destroy a tactical advantage between the parties or their attorneys. Where a weak opponent has failed to do his homework, or an insurance claims adjuster has initiated discussions with far too high an opening figure, attorneys should never cling to formulas blindly. After all, the objective
of an advocate is to represent his client’s interests zealously, and that may require him to act upon a strategic advantage that occurs from time to time. In such cases, a formula, calculated privately, may help an attorney appreciate how good a deal awaits him because of his weakened opponent’s position.

Formulas should not be arbitrarily shared with clients inasmuch as they may do more harm than good. They may mislead clients about the value of a potential claim, or the legitimacy of a particular formula for determining value. Formulas, considered in a vacuum, do not take into consideration the many other reasons why a lawyer may recommend settlement at a particular value or at a particular moment in time. In the case of unsophisticated clients, the results of a formula calculation, prematurely shared with them, may cause them, unrealistically, to fixate on a certain damages figure, frustrating the lawyer’s efforts to settle the case. Yet when negotiations are successful, a formula may provide a useful device for selling the client on the settlement. Showing a client how a formula adopts the facts of his case may reveal to him how the proffered settlement is consistent with, or perhaps greater than, the mathematical value of his loss.

1.3. When to Use Formulas

Formulas should be used whenever a decision can be informed by data. If a business loses money based on a trade violation by a competing business, how do we calculate that loss? Is it as simple as averaging past profits? What if the historical profits for the business have fluctuated over time? The answer? Apply a moving averages formula.

Should a client invest $100,000 if the result will bring $200,000 in one year? Or should the client invest $200,000 to litigate a related issue that will likely pay damages of $400,000 three years from now? Which alternative makes more sense? The answer? Conduct a net present value comparison.

Or, your client tells you that he wants to make a deal involving a parcel of commercial real estate, but only if two events occur first. There’s a 50% chance of the first event occurring, and a 65% chance of the second event occurring. How can you assess the likelihood that both events will occur first in order to move forward with the real estate deal? The answer? Perform a multiple events probability calculation.
In each case, the question includes certain data, numbers, percentages, figures, or dollar amounts. Because a formula requires one or more mathematical factors, the questions posed must include numbers in some form or another. Whenever such data or numbers exist, the question may find an answer in a formula.

Exactly when to use a formula is a personal choice. When to reveal a formula is a strategic decision. Formulas can be used at virtually every stage of legal representation, from the case intake process, through the pretrial discovery and settlement phases, and in the evidence presentation and legal argument stages of the litigation. They can be explained and displayed in pretrial memoranda, arbitration and mediation summaries, trial briefs, and on the board at trial. They can be applied retrospectively to evaluate whether the disposition of the case (i.e., the final judgment) was statistically favorable or cost beneficial. Whether a formula should be revealed, or relied upon, at any of these stages, however, is a strategic decision.

Attorneys should not rely on formulas before the discovery necessary to complete the formula has been fully conducted. Revealing a formula before all of the data is gathered may tip your adversary as to the importance of a missing factor, or how that factor can dramatically alter the perceived value of the case. It is better, then, to gather all of the data from reliable documents and testimony, and then use the data—as if it were admissions under oath—to build an irrefutable formula.

Let’s assume, for example, that a business dispute has focused on the question of how quickly a particular producer of consumer goods turns over its inventory. The formula for inventory turnover, discussed in Section 8.10, requires us to first calculate the “cost of goods sold.” In order to determine the cost of goods sold, we must know the company’s beginning inventory, the amount of inventory it purchased thereafter, and the inventory presently remaining. Until we conduct discovery on each of these values and obtain reliable data for each value, we should not reveal the inventory turnover formula as one of our bargaining tools.

Consider another example. Your client is a dependent wife in a divorce case. Her husband claims that he has far too many credit card bills to be able to pay the amount of spousal support that you are demanding on behalf of your client. A helpful formula is the take-home pay-to-debt-service ratio, through which you can determine the rela-
tionship between the husband’s net earnings and his bill-paying obligations. (See Section 17.11.) You should not, however, disclose this formula or attempt to demonstrate its logic, until you’ve reviewed the husband’s pay stubs to establish his take-home pay and you’ve obtained his admission that he has no credit card debt beyond the several accounts he specifically identified on his financial affidavit. Obtain the credit card statements with a request for production directed to the husband or a subpoena served on the credit card companies. Once you have irrefutable dollar amounts, the take-home pay-to-debt-service ratio can prove extremely helpful as a bargaining device or a litigation tool.

In some cases, it may be more strategically advantageous to invoke a formula only at trial, and only after the evidence has concluded. After both parties have presented their evidence, and it is time to deliver a closing argument (or to submit a written summation), the attorney may argue in favor of the competent evidence available for the court’s consideration.

He may argue that, based on the testimony and documentary evidence, the court should now determine the value of a particular loss or gain, or of a particular asset or liability. He may argue that a particular formula is best suited to determining the value in question, and he may demonstrate for the court how the formula can be populated with the figures adduced at trial and admitted into evidence. As counsel makes his summation, he can argue for a particular judgment based on a value established by applying the appropriate formula to the evidence at trial.