

AIMILLENNIUM

Scope: These rules shall apply to each Contract within the Class.

Underlying: The Underlying for this Contract is the number of Millennium Prize Problems within <millennium problem> that have been solved by <AI lab> <time period>, as reported by the Source Agencies. Revisions to the Underlying made after Expiration will not be accounted for in determining the Expiration Value.

Source Agency: The Source Agencies are, in hierarchical order, the official website, official publications, and public communications (including press releases and prize announcements) of the Clay Mathematics Institute, Nature, Science, the Proceedings of the National Academy of Sciences, the American Mathematical Society, the International Mathematical Union, the National Academy of Sciences of the United States, the Royal Society, the French Academy of Sciences, the Max Planck Society, the American Association for the Advancement of Science, the arXiv preprint repository operated by Cornell University, Quanta Magazine, Scientific American, Reuters, the Associated Press, Bloomberg News, the Financial Times, The Wall Street Journal, The New York Times, The Washington Post, The Economist, the British Broadcasting Corporation, and The Guardian.

Type: The type of Contract is an Event Contract.

Issuance: After the initial Contract, Contract iterations will be listed on an as-needed basis at the discretion of the Exchange and corresponding to the risk management needs of Members.

<AI lab>: <AI lab> refers to a specific artificial intelligence research organization specified by the Exchange (e.g., OpenAI, Google DeepMind, Anthropic, Meta AI, xAI, Mistral AI, Microsoft AI, DeepSeek, Alibaba Qwen). <AI lab> includes the organization's subsidiaries, divisions, laboratories, and named research units, and includes any successor entity carrying on substantially the same research activity following a renaming, reorganization, merger, or acquisition. Where the Exchange specifies more than one organization, <AI lab> may be satisfied by all such organizations being credited (AND logic) or by any one of them being credited (OR logic), as specified by the Exchange. <AI lab> may also take the form "Any," in which case a resolution attributed to any artificial intelligence research organization satisfies the attribution requirement. The Exchange may list iterations of the Contract corresponding to variations of <AI lab>.

<above/below/exactly/at least/between>: <above/below/exactly/at least/between> refers to comparison operators specified by the Exchange. "Above X" means strictly greater than X ($>X$). "Below X" means strictly less than X ($<X$). "Exactly X" means equal to X ($=X$), measured to the precision specified elsewhere in the Contract. "At least X" means greater than or equal to X ($\geq X$). "Between X and Y" means greater than or equal to X and less than or equal to Y ($\geq X$ and $\leq Y$), i.e., inclusive of both endpoints, unless otherwise specified. The Exchange may list iterations of the Contract corresponding to variations of <above/below/exactly/at least/between>.

<count>: <count> refers to a whole number of distinct Millennium Prize Problems specified by the Exchange. The Exchange may list iterations of the Contract with <count> levels that fall within an inclusive range beginning at one (1) at consecutive increments of one (1), up to the total number of Millennium Prize Problems included within <millennium problem>. Due to the potential for variability in the Underlying, the Exchange may modify <count> levels in response to suggestions by Members.

<millennium problem>: <millennium problem> refers to the Millennium Prize Problem or set of Millennium Prize Problems from which solutions are counted, as specified by the Exchange, drawn exclusively from the six remaining problems designated as Millennium Prize Problems by the Clay Mathematics Institute on May 24, 2000: the Birch and Swinnerton-Dyer Conjecture, the Hodge Conjecture, the Navier–Stokes Existence and Smoothness Problem, the P versus NP Problem, the Riemann Hypothesis, and the Yang–Mills Existence and Mass Gap Problem. Each problem is taken in the written formulation published by the Clay Mathematics Institute. Where the Exchange does not specify a subset, <millennium problem> refers to all six remaining Millennium Prize Problems. <millennium problem> is rendered in the singular or plural in the product name so as to agree grammatically with <count>, and such rendering is descriptive only and

does not modify the Payout Criterion. The Exchange may list iterations of the Contract corresponding to variations of <millennium problem>.

<time period>: <time period> refers to a specific range of time as specified by the Exchange. This may be defined by exact dates (e.g., "between January 1, 2026, and December 31, 2026"), relative markers (e.g., "before July 1, 2027"), an event, or broader intervals (e.g., "Q1–Q2 2027," "January–March 2026"). "Between" is inclusive of both endpoints, while "before" and "after" exclude the specified date unless stated otherwise. <time period> may also refer to "Any" or "None," to multiple dates (even if non-consecutive), or to a singular and discrete date or time.

Payout Criterion: The Payout Criterion for the Contract encompasses the Expiration Values that the number of Millennium Prize Problems within <millennium problem> solved by <AI lab> <time period> is <above/below/exactly/at least/between> <count>.

Additional Clarifications:

- A Millennium Prize Problem within <millennium problem> is "solved" for purposes of the Contract on the first date on which at least one of the following occurs, provided that it has not been retracted, withdrawn, repudiated, rescinded, or formally disavowed prior to the Expiration time:
 - (i) an article presenting a complete proof of the problem, a complete disproof of the problem, or a counterexample establishing the falsity of the problem, in each case as the problem is originally formulated by the Clay Mathematics Institute, is published in a refereed mathematics or scientific journal of worldwide repute, including online-first publication of an accepted peer-reviewed manuscript regardless of whether a print version has appeared;
 - (ii) the Clay Mathematics Institute, the American Mathematical Society, the International Mathematical Union, the National Academy of Sciences of the United States, the Royal Society, the French Academy of Sciences, the Max Planck Society, the American Association for the Advancement of Science, or an equivalent recognized governing or recognition body for the relevant academic field states in an official written communication, or the Clay Mathematics Institute records on its official Millennium Prize Problems pages, that the problem has been resolved by reference to a specific written work; or
 - (iii) at least two Source Agencies publish reporting in which the Source Agency itself describes the problem as having been proven, disproven, or otherwise resolved by reference to a specific publicly available written work.
- For purposes of clause (i), references to a Source Agency journal include any peer-reviewed journal published by the same publisher under the same primary journal name or brand family (e.g., references to Nature include Nature Physics, Nature Communications, and other peer-reviewed journals in the Nature Portfolio; references to Science include Science Advances and other peer-reviewed journals published by the American Association for the Advancement of Science; references to the American Mathematical Society include peer-reviewed journals published by the American Mathematical Society). Non-peer-reviewed output of the same publisher, including news sections, editorials, commentary, correspondence, and "News & Views" style content, does not satisfy clause (i), but may satisfy clause (iii) where that clause's requirements are met.
- For purposes of clause (iii), reporting that merely relays, attributes, or characterizes a claim, announcement, or assertion of resolution made by another person or organization — for example, reporting that an organization "says," "claims," "announced," or "asserts" that it has resolved the problem — does not satisfy clause (iii); the Source Agency must itself describe the problem as resolved. "Reporting" means a published article, news report, magazine feature, encyclopedia entry, official announcement, or other publicly available written communication issued under the editorial responsibility of the Source Agency, and does not include user-submitted content, unmoderated discussion forums, reader comments, or content for which the Source Agency disclaims editorial responsibility.
- The arXiv preprint repository operated by Cornell University does not exercise editorial responsibility over the works it hosts and accordingly cannot satisfy clause (i) or clause (iii). A posting on arXiv, or on any other preprint repository, may serve as the "specific publicly available written work" referenced in clauses (ii) and (iii), and may be used to establish the existence, date, content, and authorship of that work and whether it has been withdrawn.
- A "complete proof" means an argument that establishes the truth of the problem as originally formulated, in accordance with the standards of rigor of the relevant academic field. A "complete disproof" means either an argument

that establishes the negation of the problem as originally formulated or a counterexample to the problem as originally formulated. References to "proof" and "disproof" throughout these rules include counterexamples where context permits.

- Award of the Millennium Prize by the Clay Mathematics Institute is not required for a problem to be solved for purposes of the Contract. The Contract may resolve Yes notwithstanding that the Clay Mathematics Institute has not awarded, and may never award, the prize for the problem, including because the Institute's own rules require an extended period of general acceptance in the mathematics community following publication before a prize may be considered.
- A result proving that a problem is independent of, undecidable in, or neither provable nor disprovable within its associated axiomatic or theoretical framework does not constitute solving that problem.
- A proof or disproof of a special case, weakening, partial element, lemma, related but logically distinct problem, or unrelated reformulation does not constitute solving the problem, unless that result, on its face or in combination with previously established and generally accepted results in the relevant field, logically establishes the truth or falsity of the problem as originally formulated and a Source Agency expressly identifies that implication.
- A result that is conditional on an unproven conjecture, hypothesis, or assumption as a premise does not constitute solving the problem unless and until that antecedent is itself established.
- An announcement, press release, blog post, technical report published by its author on its own channels, conference presentation, demonstration, preprint posting, or machine-checked formalization does not, by itself, constitute solving the problem. Such a document may, however, serve as the "specific publicly available written work" referenced in clauses (ii) and (iii).
- A solution is attributed to <AI lab> if the Source Agencies report that the proof, disproof, or counterexample was produced, in whole or in substantial part, by an artificial intelligence system developed and operated by <AI lab>, or by <AI lab> or its personnel, and <AI lab> or such a system is credited as an author of, contributor to, or producer of the written work.
- Collaborative work involving persons or institutions other than <AI lab> is attributed to <AI lab> provided that <AI lab>, or a system developed and operated by <AI lab>, is so credited. Where two or more organizations are jointly credited and <AI lab> is among them, the solving is attributed to <AI lab>.
- A solution produced by an independent third party using a commercially or publicly available model, product, tool, or service of <AI lab>, without <AI lab>'s participation in the work and without <AI lab> or a system developed and operated by <AI lab> being credited as an author, contributor, or producer, is not attributed to <AI lab>. Crediting a product of <AI lab> with the solution itself is equivalent to crediting <AI lab> for the purposes of this Contract.
- If <AI lab> is renamed, reorganized, merged into, or acquired by another entity prior to Expiration, the successor entity carrying on substantially the same research activity is treated as <AI lab>. If <AI lab> ceases to exist and no such successor exists, the Contract resolves on solvings attributed to <AI lab> prior to its cessation.
- Each distinct Millennium Prize Problem within <millennium problem> counts at most once, regardless of the number of written works, authors, or organizations that resolve it. A single written work that resolves two or more distinct Millennium Prize Problems counts once for each such problem resolved.
- A Millennium Prize Problem that was solved, within the meaning of these rules, before the first day of <time period> does not count, even if refereed publication, official recognition, or a prize award relating to that problem occurs <time period>. For the avoidance of doubt, the Poincaré Conjecture was resolved prior to the listing of this Contract and does not count.
- If a solving is retracted by its author or by any publishing journal, is formally withdrawn, repudiated, rescinded, or disavowed, or is reported by a Source Agency to contain an identified error that has not been publicly corrected or addressed by the author in a subsequent publication or amendment, in each case prior to the Expiration time, it does not count.
- If the Source Agencies conflict as to whether, when, or by whom a Millennium Prize Problem within <millennium problem> was solved, the hierarchy set out in Source Agency above will govern. Continuing ambiguity or dispute will be resolved by Kalshi pursuant to Rule 7.1.
- If a Source Agency publishes a record and subsequently corrects, retracts, or removes that record prior to Expiration, the corrected record governs. Corrections, retractions, or removals published after Expiration will not be accounted for.

- If the Clay Mathematics Institute discontinues the Millennium Prize Problems program, dissolves, or modifies the list of Millennium Prize Problems prior to Expiration, the six remaining problems as originally designated by the Clay Mathematics Institute on May 24, 2000, continue to govern, and the remaining Source Agencies in hierarchical order will be used to determine the Expiration Value.

Minimum Tick: The Minimum Tick size for the Contract shall be \$0.01.

Position Accountability Level: The Position Accountability Level for the Contract shall be \$25,000 per strike, per Member.

Last Trading Date: The Last Trading Date of the Contract will be the final day of <time period>. The Last Trading Time will be one minute prior to the end of <time period>.

Settlement Date: The Settlement Date of the Contract shall be no later than the day after the Expiration Date, unless the Market Outcome is under review pursuant to Rule 7.1.

Expiration Date: The latest Expiration Date of the Contract shall be one week after the final day of <time period>. If an event described in the Payout Criterion occurs, expiration will be moved to an earlier date and time in accordance with Rule 7.2.

Expiration time: The Expiration time of the Contract shall be 10:00 AM ET.

Settlement Value: The Settlement Value for this Contract is \$1.00.

Expiration Value: The Expiration Value is the value of the Underlying as documented by the Source Agency on the Expiration Date at the Expiration time.

Contingencies: Before Settlement, Kalshi may, at its sole discretion, initiate the Market Outcome Review Process pursuant to Rule 7.1 of the Rulebook. If an Expiration Value cannot be determined on the Expiration Date, Kalshi has the right to determine payouts pursuant to Rule 7.1 in the Rulebook.

APPENDIX B – TRADING PROHIBITIONS

In addition to the general prohibition against trading on material nonpublic information, the Exchange will institute additional prohibitions for trading the contract. Persons under 18 years of age are not permitted to create Kalshi accounts. The following individuals will be prohibited from trading:

- Any employee, officer, director, contractor, or agent of <AI lab>, including of any subsidiary, division, laboratory, or research unit thereof, with access to material nonpublic information regarding <AI lab>'s progress toward, or intended publication, formalization, or announcement of, a resolution of any Millennium Prize Problem.
- Any author, co-author, or contributor to a written work claiming to resolve any Millennium Prize Problem that has not yet been made publicly available, and any person with access to such a work.
- Any employee, officer, director, trustee, contractor, or agent of the Clay Mathematics Institute, including any member of its Scientific Advisory Board or of any special advisory committee constituted to evaluate or recognize a claimed resolution of a Millennium Prize Problem.
- Any editor, referee, reviewer, or editorial staff member of a refereed mathematics or scientific journal with access to material nonpublic information regarding a submitted, accepted, or forthcoming work claiming to resolve any Millennium Prize Problem.
- Any employee, officer, contractor, or agent of a Source Agency listed in Appendix A with access to material nonpublic information relating to the Underlying.
- Any person who otherwise has the ability to influence, or has advance knowledge of, the publication, official recognition, retraction, withdrawal, or repudiation of a claimed resolution of any Millennium Prize Problem attributed to <AI lab>.
- The immediate family members and members of the same household of any person described above

