Exemplar Computing Functions And Their Advantages
(access functions on www.agusolv.com by using P_ID)

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The following table shows some exemplar computing functions and their advantages over existing methods. A user can access the function by search using P_ID. A user may solve complex problems by using different pages.

Some Exemplar Human Tasks	Agusolv P_ID	Common Existing Methods	Advantages of Agusolv over Existing Methods
General calculation for all purposes.	3000025	It is like a programmable calculator, but better.	Free, very powerful, time saving and allow for correction of key errors.
Compute sums for a set (1000) of numbers	3000031	Punch data into a calculator, and may require several tries	Enter data by hand or copying, save 75%-99% time, and allow for correction of key errors.
Compute 4x4 determanant	3000006	Punch data in a calculator or do manual operations.	Save 99% time over manual method, and save 50% over calculator.
Matrix Inversion	3000005	Experts solve it by using a calculator, but a layperson may give up.	Enable some users, save 99% time over manual method, and save 50% over a calculator.
Solve Linear Equations	3000007	Experts solve it by using a calculator, but a layperson may give up.	Enable most users, save 99% time, save more than 75% of time, and reduce change of errors.
Fit data in a curve.	3000022 3000023 (new forms)	Experts solve it by using a calculator or computer, but a layperson may give up.	Enable most users, save 95% to 99% time, and allow for easy correction of type errors.
Compare two random variables (e.g., two sets of data)	3000019	Experts solve it by using a calculator or computer, but a layperson may give up.	Enable untrained users, save 95% to 99% time, and allow for correction of key errors.
Compute all statistical moments	3000016	Experts solve it by using a calculator or computer, but a layperson may give up.	Enable untrained users, save 95% to 99% time, and allow for correction of type errors.
Determine if a set of numbers is proportional to a set of known data (as in formulation, optimization)	3000075 3000076 (New forms to be added)	Experts solve it by using a calculator or a computer, but laypersons may give up.	Enable users, save 95-99.5% time, and reduce chance of errors.
Compute row	3000062	Use a calculator or	Save 95-99.5% time, reduce

sums and column sums for nxm data points.	3000063 3000064 3000065 3000066	computer, and do 2x (nxm) times of computations.	chance of errors, and allow for correction of key errors.
Compute service fees for many charges	3000068	Do manual computation if it is not automated.	Save 95-99.5% time, reduce chance of errors, and allow for correction of key errors.
Convert any unit to another unit	Use "Universal unit converter"	Search constants and compute it. Laypersons may be unable to handle rare units.	Enable some users, and save 50% to 99% time. (Find a conversion page by typing a start unit and do conversion).
Evaluate loan costs, installments, future value, and present value etc.)	1000001 1000008 1000003 1000005 etc.	Users need to learn equations, constants, and operational steps.	Enable most users, save up to 90% time with fewer errors.
Compare utility costs for two different utilities based on specific use conditions.	(To be added)	Laypersons may give up, or search necessary data and methods for computation.	Enable most users, reduce chance of errors, and save 95%-99.9% time.
Home project design	All relevant math tools	Give up or use a calculator.	Enable most users, reduce chance of errors, and save 90%-99.
Compute weekly pay with or without over time	3000000 3000003	Use a calculator if the process is not automated.	Reduce chance of key errors, save 25%-75% time, allow for correction of key errors.
Create a court cost bill for multiple charges	3000070	Use a calculator if the process is not automated.	Reduce chance of key errors, and save 25%-75% time.
Determine total energy for a list of food items in a period.	3000067	Give up, or find data and compute it.	Reduce chance of key errors and data errors, and save 50%-99% time.