

Operator	Rule	Explanation	Example in/for product development
plus “+”	Addition, summation, unification	To give an additional task to a given resource; adding a resource (if allowed); Task unification: to utilize a given component or resource for another, equally important task	Apollo 13, where only available components were used to build a new kind of filter in space [see also 22]; Facial moisturizers now have the equal task to provide sunscreen protection
minus “-“	Subtraction	To eliminate essential components; to suppress or reduce an effect; resource removal by assigning its function to other resources	Elimination of water in fabric conditioner for easier carrying; A bicycle without wheels for in-house training;
times “x”	Multiplication	Multiply available components; introducing a (slightly modified) copy of an existing resource	The double and triple (and even more...) blades in a razor; Several flashes before a picture is taken to reduce red-eye effects
divide “:”	Division	The division of a product or its components by function; divide a resource and reorganize its parts;	Two-component adhesive; Radio with separable interface in cars to prevent theft; remote control systems;
greater than “>”	More, bigger or new relation	New or increased relation between components of a function; New or bigger relation between attributes or attribute dependency or correlation	Self-tanning of glasses is depending on sunlight exposure; Windshield wipers change speed as the amount of rain changes;
and/or	and/or	and/or	and/or
less than “<”	Decreasing, diminishing or smaller relation	Less of or breaking a given relation between components or of a function; Less or no attribute dependency or correlation.	headlights dim automatically for oncoming cars; Translucent casing of batteries or ink pens to indicate fill level; “Happy-hour” in a bar with reduced prices for drinks during hours of low frequency
equals “=”	(Do not do) Equalization*	Breaking symmetry; turning a symmetrical situation into an asymmetrical one	Instead of 4 wheels of same size, combine 2 smaller with 2 bigger wheels for better maneuverability (of a stroller, a wheelchair, a tractor, ...)

*The Equals-Operator will be details in the Playing TRIZ-book, Vol. 2, p. 95.