

Bibliography

- Abbott, Edwin A. (1884) [2002]. *Flatland: A Romance of Many Dimensions*. Introduction and Notes by Ian Stewart. New York: Basic Books.
- Aristotle. (2012). *The Organon* (R. B. Jones, E. M. Edghill, & A. J. Jenkinson, Trans.). CreateSpace Independent Publishing Platform.
- Augustine, St. (1912). *St. Augustine's confessions* (W. Watts, Trans.). Cambridge: Loeb Classical Library.
- Bacon, R. (2013) [1605]. *The advancement of learning*. CreateSpace Independent Publishing Platform
- Bacon, R. (2015) [1620]. *Novum Organum*. Chicago: Leopold Classic Library.
- Baker, S. (2008). *The Numerati*. Boston: Houghton Mifflin Harcourt.
- Billow, R. M. (1975). A cognitive developmental study of metaphor comprehension. *Developmental Psychology*, 11, 415–423.
- Clement, J., Lochhead, J., & Monk, G. S. (1981). Translation difficulties in learning mathematics. *American Mathematical Monthly*, 88, 286–290.
- Cook, S. (1971). The complexity of theorem proving procedures. In *Proceedings of the Third Annual ACM Symposium on Theory of Computing* (pp. 151–158).
- Costello, M. J. (1988). *The greatest puzzles of all time*. New York: Dover.
- Danesi, M. (2013). *Discovery in mathematics: An interdisciplinary approach*. Munich: Lincom Europa.
- Devlin, K., & Lorden, G. (2007). *The numbers behind Numbers: Solving crime with mathematics*. New York: Plume.
- Dienes, Z. (1964). *An experimental study of mathematics learning*. London: Hutchison.
- Dolan, D. T., & Williamson, J. (1983). *Teaching problem-solving strategies*. Menlo Park: Addison-Wesley.
- Du Sautoy, M. (2004). *The music of the primes: Bernhard Riemann and the greatest unsolved problem in mathematics*. New York: HarperCollins.
- Epp, S. S. (2013). Variables in mathematics education. In M. Pitici (Ed.), *The best writing in mathematics 2012* (pp. 163–172). Princeton: Princeton University Press.
- Euclid. (1956). *The thirteen books of Euclid's elements, 3 volumes*. New York: Dover.
- Fadiman, C. (Ed.). (1958). *Fantasia Mathematica*. New York: Copernicus.
- Fadiman, C. (Ed.). (1962). *The mathematical Magpie*. New York: Copernicus.
- Fixx, J. F. (1983). *Solve it!*. London: Muller.
- Freiberger, M., & Thomas, R. (2014). *Numericon: A journey through the hidden lives of numbers*. New York: Quercus.
- Galilei, G. (2001) [1632]. *Dialogue concerning the two chief world systems* (S. Drake, Trans.). New York: Modern Library.
- Gardner, H. (1983). *Frames of mind: The theory of multiple intelligences*. New York: Basic.
- Goetzfridt, N. J. (2008). *Pacific ethnomathematics: A bibliographic study*. Honolulu: University of Hawaii Press.

- Hobbes, Thomas. (1839) [1656]. *Elements of philosophy*. London: Molesworth.
- Hoffer, W. W. (2012). *Minds on mathematics: Using math workshop to develop deep understanding in grades 4–8*. Portsmouth: Heinemann.
- Husserl, E. (1970) [1891]. *Philosophie der Arithmetik*. The Hague: Nijhoff.
- Innis, H. (1951). *The bias of communication*. Toronto: University of Toronto Press.
- Jenkins, H. (2006). *Convergence culture: Where old and new media collide*. New York and London: MIT.
- Johnson, S. (2005). *Everything bad is good for you: How today's popular culture is actually making us smarter*. New York: Riverside.
- Kanigel, R. (1992). *The man who knew infinity: A life of the genius Ramanujan*. New York: Washington Square Press.
- Kaplan, R., & Kaplan, E. (2008). *Out of the labyrinth: Setting mathematics free*. New York: Bloomsbury.
- Kolmogorov, A. N. (1933). *Grundbegriffe der Wahrscheinlichkeitsrechnung, Ergebnisse Der Mathematik*. Berlin: Springer.
- Kotsopoulos, D. (2013). Code-switching during mathematics instruction in a ninth grade setting. In M. Bockarova, M. Danesi, & R. Núñez (Eds.), *Semiotic and cognitive science essays on the nature of mathematics* (pp. 71–82). Munich: Lincom Europa.
- Liebeck, P. (1984). *How children learn mathematics: A guide for parents and teachers*. Harmondsworth: Penguin.
- Malebranche, N. (1997) [1688]. *Dialogues on metaphysics and religion*. Cambridge: Cambridge University Press.
- Maor, E. (2007). *The Pythagorean theorem: A 4,000-year history*. Princeton: Princeton University Press.
- Marx, K. (1953) [1858]. *Grundrisse der Kritik der Politischen Oekonomie*. Berlin: Dietz.
- McGinty, J. C. (2015). To find a romantic match, try some love math. *U.S. News*, February 14–15, section A2.
- McKellar, D. (2007). *Math doesn't suck: How to survive middle school math*. New York: Hudson Street Press.
- McLuhan, M., & Leonard, G. B. (1967). The future of education: The class of 1989. *Look*, February 21, pp. 23–24.
- McNeill, D. (2005). *Gesture & thought*. Chicago: University of Chicago Press.
- Miller, G. A. (1956). The magical number seven, plus or minus two: Some limits on our capacity for processing information. *Psychological Review*, 63, 81–97.
- Neuman, Y. (2013). Semiotics, mathematics, and information technology: The future is already here. In M. Bockarova, M. Danesi, & R. Núñez (Eds.), *Semiotic and cognitive science essays on the nature of mathematics* (pp. 153–164). Munich: Lincom Europa.
- Nietzsche, F. (1873) [1979]. *Philosophy and truth: Selections from Nietzsche's notebooks of the early 1870's*. Atlantic Heights, NJ: Humanities Press.
- Oakley, B. (2014). *A mind for numbers*. New York: Tarcher.
- Petersen, J. (2013). *Math games for number and operations and algebraic thinking: Games to support independent practice in math workshops and more, grades K-5*. Sausalito: Math Solutions Publications.
- Petroni, S. (2011). *Language on the multimodal web domain*. Rome: Aracne.
- Plato. (2014). *Apology*. New York: Philosophical Society Series.
- Pólya, G. (1921). Über eine Aufgabe der Wahrscheinlichkeitsrechnung betreffend die Irrfahrt im Strassennetz. *Mathematische Annalen*, 84, 149–160.
- Recorder, R. (2012) [1540]. *Grounde of Artes*. CreateSpace Independent Publishing Platform.
- Rosenhouse, J., & Taalman, L. (2011). *Taking sudoku seriously*. Oxford: Oxford University Press.
- Rucker, R. (Ed.). (1987). *Mathenauts: Tales of mathematical wonder*. New York: Arbor House.
- Shannon, C. E. (1948). A mathematical theory of communication. *Bell Systems Technical Journal*, 27, 379–423.

- Smolin, L. (2013). *Time reborn: From the crisis in physics to the future of the universe*. Boston: Houghton Mifflin Harcourt.
- Sperber, D., & Wilson, D. (1986). *Relevance, communication, and cognition*. Cambridge, Mass: Harvard University Press.
- Takahashi, S., & Inoue, I. (2012). *Linear algebra*. San Francisco: No Starch Press.
- Wiener, N. (1948). *Cybernetics, or control and communication in the animal and the machine*. Cambridge, Mass: MIT Press.

Index

A

Abbott, Edwin A., 49
Abelard, Peter, 7
Acalculia, 146
Age of Print (Print Age), 10, 40, 41, 44–47,
78–80, 100, 118, 157, 167
Ahmes Papyrus, 5, 44
Al-Khwarizmi, 9, 43
Algorithm, 16, 31, 50, 59–63, 65, 66, 90, 126,
164
Alphabet, 41, 42, 44, 45, 56, 79, 112, 113, 136,
145, 173
Alphabet effect, 57, 79, 142, 145
Amplification, 30, 37, 143
Amputation, 137, 156, 157
Analogy, 19, 93, 94, 128, 146
Anarithmeia, 146
Anecdotal math, 1, 20, 22, 24, 30, 40, 48, 65,
83, 92, 110, 123, 125, 133, 159
Antiquity, 1, 3, 6, 44, 49, 130
Archimedes, 52
Aristotle, 3, 8, 9
Arithmetic, 1–4, 6–10, 19, 25, 27, 30, 40, 42,
61, 63, 105, 128, 146, 147, 149, 159
Aronofsky, Daren, 119
Artifactual, 41, 45
Augmentation, 156
Augustine, St., 7
Axiom, 12, 15, 16, 18

B

Babylonians,, 43
Bachet de Mézirac, 52
Bacon, Francis, 10, 12
Basic skills, 15, 17
Baudrillard, Jean, 39
Bayesian Inference, 23, 31
Bentham, Jeremy, 13

Berkeley, George, 7, 12
Binary number, 104
Blending, 25, 27, 66, 95, 96, 101, 135,
141–158, 160, 169, 174
Blending, pedagogical, 157, 158, 165, 174
Blending, psychological, 141, 148, 149, 174
Blending, technological, 141, 154–157, 165
Boethius, 7, 9
Bricolage, 100, 101
Butterworth, Brian, 142, 144, 146

C

Cantor, George, 94, 148
Cardano, Gerolamo, 44, 52, 86, 87, 161
Cartoon, 51, 96, 101, 114, 115, 117, 118
Centrifugal, 19, 22, 26, 64
Centripetal, 17, 19
Claude-Gaspar, 52
Chardin, Pierre Teilhard de, 156, 165, 166
Chinese, 6, 43, 45, 83
Chomsky, Noam, 79, 111
Classroom without walls, 31, 82, 103, 104,
110, 135, 137
Collage, 100, 101
Comic book, 22, 46, 78, 109, 112, 115–119,
134, 133
Comic-book pedagogy, 117
Common Core, 29
Communal brain, 79–83, 87, 100, 112, 127,
150, 154
Communication, 38–40, 51, 53, 57, 70, 80, 82,
88, 89, 96, 98, 102, 103, 133, 155, 157,
159, 160, 168, 172, 174
Computer program, 17, 29, 56, 62, 63, 67
Computer science, 17, 37, 40, 59, 60, 64, 89
Concentricity, 166, 167
Conceptual metaphor, 95–97, 147, 148,
151–153

- Connected intelligence, 26, 31, 75, 77, 82, 100, 104, 124, 141, 143, 157, 159, 160, 166, 168, 171, 173, 174
- Convergence, 38, 47, 53, 154
- Creative commons, 112
- Cryptography, 103, 122, 126
- Curriculum, 1–3, 8–10, 13–19, 29, 30, 66, 67, 69, 105, 126, 154, 165
- Cybernetics, 66
- Cyborg theory, 82
- D**
- Decidability, 60, 94
- Decimal system, 4, 9, 42, 43
- Deduction, 10, 18
- Deductivism, 12, 15, 17
- Defense Attorney's Fallacy, 24
- Dehaene, Stanislas, 4, 27, 142, 145, 146
- Depressed cube, 86, 87
- Descartes, René, 7, 12
- Devlin, Keith, 9, 48, 49, 126, 127–129, 142, 145
- Dewey, John, 15
- Diagonal proof, 94
- Diagram, 6, 25, 51, 55, 56, 58, 92–94, 97, 131, 132, 142, 153, 156, 157, 158
- Dialogue, 7, 12, 33, 38, 41, 42, 44, 57, 58, 68, 78, 84, 86, 88, 98, 124, 135, 160, 163, 174
- Digital Age, 13, 15, 19, 31, 38, 44, 46, 48, 67, 70, 80, 103, 113, 119, 166, 168
- Digital Galaxy, 52–57, 64, 67, 69, 77, 89, 101, 109, 121, 141
- Digital world, 30, 31
- Diophantus, 6
- Disputation, 7, 10, 11
- Double articulation, 42, 147
- Drake equation, 20
- Dyscalculia, 146
- E**
- Economy, 43, 79, 88, 89
- Edutainment, 133, 134
- Effectiveness, 9, 89
- Efficiency, 9, 42, 43, 88, 89, 161
- Egyptians, 2, 4, 6
- 3-E Law, 42, 43, 45, 88, 89
- Electronic Age, 44, 113, 129
- Electronic communications, 98
- Elements, The*, 1, 4, 6, 9, 38, 44, 76
- Enlightenment, 7, 11, 12, 31, 41, 45, 166, 169, 174
- Ethnomathematics, 27, 28, 96
- Epicureanism, 9
- Euclid, 1, 2, 4, 9, 16, 17, 38, 44, 61, 62, 164
- Euclidean geometry, 12, 144
- Euler, Leonhard, 83
- Extension, 31, 32, 37, 40, 44, 66, 102, 127, 135–137, 141, 142, 154
- F**
- Facebook, 75–78, 84–88, 90, 119, 160
- Fibonacci sequence, 101, 120
- Fibonacci, Leonardo, 9, 43, 52, 101, 120, 165
- Ficino, Marsilio, 10
- Fictional narratives, 49
- Fiore, Antonio Maria, 86, 87
- Flailand: A Romance of Many Dimensions*, 49
- Flowchart, 62–65, 164
- Fordist, 82, 102, 170, 171
- Four Color Problem, 59
- Four laws of media, 157
- Fraction, 5, 20, 50, 94, 97, 105
- Frankfurt School, 81, 110, 111
- Fundamental Theorem of Arithmetic, 61
- Futurama*, 125
- G**
- Galileo, 7, 10
- Game, 17, 21, 23, 38, 49, 50, 69, 109, 110, 114, 115, 126, 127, 129, 130, 134, 165
- Gardner, Martin, 23, 49, 84, 131, 132, 171, 172
- Geometry, 1, 3, 4, 6, 7, 9, 11, 12, 16, 18, 29, 30, 50, 92, 126, 131, 144
- Gesticulant, 96
- Global brain, 82, 88, 156, 157, 165
- Global Village, 28, 29, 37–41, 70, 75–78, 80, 82, 86, 87, 91, 92, 100, 135, 137, 141, 142, 149, 156, 158, 160, 165, 166, 167, 169
- Gödel, Kurt, 16, 50, 61, 93–95, 106, 118, 148
- Google, 64, 91
- Gowers, Tim, 31, 83, 151
- Great Internet Mersenne Prime Search (GIMPS), 26
- Greek mathematics, 6
- Grounding metaphor, 147, 149
- Gutenberg Galaxy, 44, 46, 51, 55, 56, 68, 69, 80, 88, 99, 166
- Gutenberg, Johannes, 38, 44–46, 51, 55, 56, 68, 80, 88, 99, 166
- H**
- Halting problem, 16, 60
- Hegel, Georg Wilhelm Friedrich, 12
- Hegemony, 111, 112
- Hilbert, David, 16, 118
- Hume, David, 12

Husserl, Edmund, 15
 Hyperreality, 39, 40, 55
 Hypertext, 31, 32, 53, 54

I

Image schema, 143, 151–154
 Individualist brain, 79, 80, 81, 87, 105, 155, 157, 165
 Induction, 10
 Inductivism, 15, 18
 Industrialist Age, 15, 19, 30, 45, 170, 172
 Information, 5, 6, 19, 23, 24, 25, 30–32, 37, 38, 41, 42, 46, 47, 53, 54–57, 59, 63, 67, 75, 77, 84, 85, 87–90, 92, 101–104, 112, 113, 121, 124, 130–132, 136, 142, 143, 144, 149, 150, 155, 156, 169, 173, 174
 Information Society, 75, 102, 103
 Integer, 44, 52, 83, 94, 97, 151
 Internet, 19, 25, 26, 28, 30, 31, 32, 38, 39–41, 46, 52, 53, 54, 56, 58, 68, 76, 81, 82–84, 90, 102, 103, 110, 111, 112, 124, 126, 136, 137, 155, 156, 158, 159, 163–165, 173
 Intuition, 4, 8, 12, 97, 144
 IQ test, 76, 79, 157

J

James, William, 15

K

Kant, Immanuel, 12, 142
 Kerckhove, Derrick de, 100, 101
 Knowledge-making, 41, 44, 45, 102, 142, 145

L

Lakoff, George, 27, 28, 67, 93, 95, 142, 143, 146, 147–149, 151
 Language, 1, 2, 5, 8–10, 16, 17, 26–28, 48, 63, 67, 77, 78, 80, 89, 94, 95, 96–98, 116, 117, 120, 141–148, 151, 152, 154, 156, 171
 Learner, 13, 4, 13, 14, 15, 17, 18, 28, 33, 44, 46, 56, 63, 129, 173
 Learning style, 40, 41, 55, 58, 100, 114, 120, 165
 Leibniz, Gottfried Wilhelm, 12
Liber Abaci, 9, 43
 Linearity, 13, 14, 32, 55, 96, 99, 101, 142, 145, 166, 167
 linking metaphor, 28, 147
 Lippmann, Walter, 79, 111
 Lo Shu, 83
 Locke, John, 12
 Logic, 2, 3, 8–12, 16, 48, 49, 60, 67, 111, 122, 137, 143, 147, 151, 157, 171
Logos, 8

M

Magic square, 83, 84
 Magic square of squares, 83, 84
 Malebranche, Nicolas, 7
 Manipulative, 19, 30, 56, 57, 58, 97, 111
 Manuscript, 4, 5, 45, 80
 Markov chain, 65
 Marx, Karl, 12, 81
 Mass communications, 37, 40, 53, 70, 102, 110, 133, 174
 Math classroom, 7, 20, 26, 39, 46, 48, 52, 55, 59, 61, 104, 123, 133, 157, 167
 Math cognition, 28, 95, 97, 142, 143, 147
 Math education, 1, 2, 4–6, 10, 11, 14–17, 19, 22, 26, 28, 37–39, 41, 44–46, 51, 52, 54, 68, 69, 75, 76, 83, 103, 105, 106, 110, 113, 114, 118, 123, 127–130, 142, 149, 154, 166, 169
 Math in print, 51
 Math movie, 119, 121–123
 Math pedagogy, 1–3, 17, 19, 21, 26, 28, 29, 32, 40, 58, 59, 103, 141, 148, 167
 McLuhan, Marshall, 37, 38, 78, 112, 115, 119, 124, 138, 145, 166, 167
 McNeill, David, 95
 Mediasphere, 75, 77, 84, 100–103, 105, 110–112, 133
 Medieval period, 9, 76
 Mersenne formula, 26
 Metaphor, 13, 28, 82, 93–97, 143, 146, 147–152, 156, 174
 Metonymy, 146, 150
 Mill, John Stuart, 13
 Monty Hall Problem, 22, 23
 MOOC, 33, 41, 47, 58, 135, 137
 Morgenstern, Oskar, 21
 Movies, 25, 41, 78, 91, 102, 109, 114, 119–121, 123, 125, 133, 134, 168
 Multimedia, 25, 32, 85, 156, 165, 168
 Multimodality, 26, 55, 57
Mythos, 8, 39

N

Natural logarithm, 64
 National Council of Teachers of Mathematics (NCTM), 14, 19, 54, 69
 Negative number, 44, 97, 147
 Neuroscience, 27, 141, 142
 New math, 17, 19, 29, 30, 43, 69, 148
 Nietzsche, Friedrich, 13
 Notation, 42, 43, 52, 93, 128, 147, 152, 153
Numb3rs, 31, 114, 125, 126
 Number, 2–5, 8, 13, 16, 19, 20, 23, 24, 26–29, 33, 42, 43, 44, 49, 52–65, 80, 83, 86, 89,

- 90, 92, 94–97, 105, 114, 117, 119, 120, 126, 129, 132, 142–151, 159–1164, 170
- Number line, 26, 65, 96, 97, 145, 147
- Number sense, 143–147, 150
- Numeral, 10, 16, 42, 43, 89, 96, 146
- Numerosity, 144, 145, 150
- Núñez, Rafael, 27, 67, 142–144, 146, 149, 150
- O**
- Obsolescence, 37
- Ong, Walter, 39, 79, 98
- Online math, 53, 58
- Orality, 38, 39, 41, 42, 55, 70, 78, 98, 99, 115, 124, 157
- Orality, primary, 39, 98
- Orality, secondary, 39, 55, 70, 80, 88, 98, 99
- Osmosis, 95, 97, 153
- P**
- $P = NP$, 60, 61, 126
- Pappus, 143
- Paradigm shift, 10, 41, 45, 46, 52, 66, 101, 106, 173
- Paradox, 8, 28, 29, 81, 82, 99, 121, 137, 167, 169
- Pastiche, 100–103, 115, 133, 166, 169
- Peano, Giuseppe, 15, 16
- Pedagogy, 1–3, 6, 12–14, 17–19, 21, 26, 28, 29, 32, 40, 44, 58, 59, 69, 82, 84, 90, 93, 103, 113, 114, 116, 124, 129, 131, 134, 141, 148, 158–160, 165–167, 170, 172
- Peirce, Charles S., 15, 143
- Phenomenology, 15
- Pi* (π): *Faith in Chaos*, 119
- Piazza, 86, 87, 125
- Piazza feuds, 87
- Plotinus, 9
- Poe, Edgar Allan, 113, 122
- Polya, George, 16, 17, 26, 65
- PolyMath Project, 31, 83, 126
- Pons asinorum*, 76
- Pop culture, 21, 24, 28, 40, 41, 46, 48, 109–118, 121–123, 125, 132, 133–135, 165–168
- Pop math47–52, 55, 58, 109, 115, 117, 118, 120, 123, 125, 132–134, 148, 160, 165, 167
- Post-humanism, 82
- Postulate, 89
- Pragmatism, 15
- Pre-math, 3, 4, 6, 105, 142
- Prisoner’s Dilemma, 21
- Probability theory, 11, 22–24
- Project 2061*, 19
- Proof, 1–4, 6, 8, 10, 18, 19, 27, 28, 31, 51, 59, 60, 87, 94, 95, 114, 121, 126, 129, 145–148
- Proof by exhaustion, 59, 60
- Proposition, 6, 24, 76, 89
- Prosecutor’s Fallacy, 22, 24
- Proximal zone, 14
- Psychology, 13, 21, 41, 44, 69, 81, 101, 105
- Puzzle, 5, 48, 49, 52, 58, 60, 84, 120, 127, 130–132, 159, 161–163
- Pythagoras, 1, 2, 6, 106
- Pythagoras’s theorem, 2
- Q**
- QED, 4, 114
- Quadrivium*, 3
- R**
- Random walk, 65
- Reading, 10, 15, 38, 41, 45–48, 51, 54, 55, 57, 66, 76, 79, 80, 98, 103, 118, 124, 129, 134, 142, 146, 150, 159, 160, 165
- Rear-view mirror, 41, 167, 168
- Recorde, Robert, 10, 66
- Recreational math, 24, 49, 50, 52, 132, 161
- Reductio ad absurdum*, 7, 10
- Reform Movement, 13, 14, 29, 170
- Reformer, 44
- Renaissance, 3, 9–11, 28, 41, 66, 78, 123
- Retrieval, 37–39, 41, 44, 46, 57, 80, 102, 137, 158
- Reversal, 37, 138, 158
- Rhind Papyrus*, 5
- Robert of Chester, 9
- Roman numeral system, 424
- Romantic era, 11
- 3-Rs, 15
- Russell, Bertrand, 16, 118
- S**
- Sartre, Jean-Paul, 15
- School board, 17, 19
- Scribe, 5, 45, 80
- Selvin, Steven, 22
- Sense ratio, 56, 57, 67
- Sequence, 3, 5, 14, 16, 18, 30, 45, 46, 62, 67, 92, 95, 101, 105, 120, 126, 148, 161, 165
- Series, 8, 20, 48, 63, 82, 91, 114, 116, 125, 143, 159, 161–165
- Set theory, 12, 16, 17, 30, 105, 126
- Shannon, Claude E., 103, 104
- Simpsons, The*, 122, 114, 125

- Social media, 38, 39, 54, 57, 75, 77–84, 87, 88, 98–106, 113, 119, 135, 137, 148, 154, 155, 163, 165, 168, 173
- Socrates, 3, 6–8, 123
- Socratic method, 2, 6
- Spinoza, Baruch, 12
- Stoicism, 9
- Sudoku, 49, 60
- Symbolism, 128, 145, 146, 173
- T**
- Tartaglia, Niccolò, 52, 86, 87
- Teacher, 2, 3, 6, 10–14, 17–19, 30, 32, 33, 41, 44, 46, 48, 51, 53, 54, 56–59, 66, 68, 69, 75, 78, 82, 84–87, 90–93, 101, 103, 104, 109, 113, 114, 118, 119, 121, 123, 129, 130, 133–135, 137, 149, 154, 157, 159, 160, 165, 168, 170–172
- Technology, 1, 6, 19, 21, 28, 31–34, 37, 38, 40, 41, 44, 45, 53, 56, 58, 59, 66–69, 77, 78, 81, 82, 89, 90, 99, 104, 106, 109, 115, 119, 127, 129, 130, 133, 135, 136, 138, 141, 159, 166, 170, 172–174
- Technopoly, 173, 174
- Television, 22, 31, 40, 41, 47, 50, 70, 78, 92, 109, 110, 113–116, 123–126, 133, 134, 168
- Text, 1, 9, 10, 13, 25, 26, 28, 31–33, 38, 39, 42, 44–47, 53–55, 57, 63, 66, 78, 80, 98–101, 109, 115, 116, 118–120, 124, 145
- Textbook, 1, 5, 10, 17, 39, 41, 44–47, 51, 52, 54, 56, 68, 69, 86, 117, 118, 134, 137, 152, 159, 167, 168
- Thales, 1
- Theorem, 2, 6, 8, 23, 31, 50, 59–61, 76, 87, 94, 120, 122, 126, 127, 131, 132, 145, 146, 150
- Tool, 7, 21, 25, 27, 38, 39, 41, 42, 44, 48, 51–54, 56, 58, 59, 66, 78, 86, 88, 89, 92, 99, 119, 123, 134–138, 168, 171, 173, 174
- Translation, 9, 16, 17, 43, 117
- Treatise, 1, 6, 7, 9, 45, 88, 125
- Trivium*, 3, 15
- Turing, Alan, 16, 122
- TV math, 124, 125
- Twentieth century, 15, 19, 30, 41, 44, 46, 66, 80, 119
- Twitter, 6, 75, 76, 77, 78, 85, 88–91
- U**
- Undecidability, 94
- Utilitarianism, 13, 19
- V**
- van Hiele-Geldof, Dieke, 18
- van Hiele, Pierre, 18
- Video, 22, 25, 32, 33, 47, 85, 91–93, 95, 96, 97, 100, 101, 125, 133
- Video game, 38, 50, 109, 110, 127–130, 133–135
- Virtual manipulative, 56
- Visualization, 25, 93, 142, 143
- von Neumann, John, 21, 61
- Vygotsky, Lev, 7, 14, 15
- W**
- Wall-less classroom, 34, 121, 137
- Web 2.0, 33, 76, 78, 79, 81, 84, 98, 100, 142
- Whitehead, Alfred North, 16
- Wiener, Norbert, 66
- Wikipedia, 25, 65, 157
- World Wide Web, 25, 32, 41, 53
- Writing, 7, 10, 12, 25, 26, 33, 38–42, 44–46, 50, 51, 53, 55, 59, 66, 67, 79, 83, 98, 99, 101, 103, 125, 128, 132, 137, 142, 145–147, 156, 159, 160, 166
- Y**
- YouTube, 22, 54, 75, 78, 91–93, 95–97, 100, 101, 105, 112, 119, 125, 133, 136, 160, 164, 168
- Z**
- Zeno of Elea, 8
- Zero, 16, 21, 43, 44, 65, 97