Math reading that you would enjoy

Terrific logic problems books

1. M. Gardner, Aha! Gotcha, Freeman &Co,1983, ISBN 0-7167-1017-x
2. M. Gardner, Aha! Insight, Freeman &Co,1983, ISBN 0-7167-1017-x
3. R. Smullyan, The Lady or the Tiger?, Alfred A. Knopf, NY, 1982
4. R. Smullyan, Alice in the Puzzle-Land, Penguin Books, 1984

In fact, any Martin Gardner's and R. Smullyan's books are great.

Puzzles and miscellaneous problems

1. S. Barr, Mathematical Brain Benders, Dover, 1982, ISBN 0-486-24260-9
2. Brian Bolt, Mathematical Cavalcade, Cambridge Univ. Press,
3. Brian Bolt, A mathematical Pandora's box
4. Brian Bolt, The amazing mathematical amusement arcade
5. H.E. Dudeney, Amusements in Mathematics, Dover, 1970, ISBN 0-486-20473-1
6. H. Dudeney, 536 Puzzles & Curious Problems, Charles Scribner's Sons, NY, 1967, ISBN 0-684-71755-7
7. J. Frohlichstein, Mathematical Fun, Games and Puzzles, Dover, 1967, ISBN 0-486-20789-7
8. A. Friedland, Puzzles in Math and Logic, Dover, ISBN 0-486-22256-x, 1970
9. A. Gardiner, Mathematical Puzzling, Oxford Univ. Press, 1993, ISBN 0-19-914258-0
10. M. Gardner, The Unexpected Hanging and Other Mathematical Diversions, Univ. of Chicago Press, 1991, ISBN 0-226-28256-2
11. M. Gardner, The Second Scientific American Book of Mathematical Puzzles and Diversions, Univ. of Chicago Press, 1987, ISBN 0-226-28253-8,

Exciting books about different areas of math

1. E. Abbott, Flatland, A Romance of Many Dimensions, Dover, ISBN 0-486-27263-x, 1992. Or Princeton Univ. Press, 1991, ISBN 0-691-02525-8
2. S. Barr, Experiments in topology, Dover, 1964, ISBN 0-486-25933-1
1. B. Bold, Famous problems of geometry, Dover, 1982, ISBN 0-486-24297-8
2. M. Burns and M. Weston, The I Hate Mathematics! Book; Little, Brown & Co, 1975, ISBN 0-316-11741-2
3. R. Courant and H. Robbins, What is Mathematics?, Oxford Univ. Press, ISBN 0-19-510519-2
4. M. Gardner, Mathematics Magic and Mystery, Dover, 1956, ISBN 0-486-20335-2
5. M. Gardner, Hexaflexagons and Other Mathematical Diversions, Univ. of Chicago Press,1988, ISBN 0-226-28254-6
6. M. Gardner, The New Ambidextrous Universe, Freeman &Co,1990, ISBN 0-7167-2093-0
7. M. Gardner, Knotted Doughnuts, Freeman, 1986, ISBN0-7167-1799-9
8. M. Gardner, Wheels, Life and Other Mathematical Amusements, Freeman &Co,1983, ISBN 0-7167-1589-9

9. M. Gardner, Penrose Tiles to Trapdoor Ciphers, Freeman &Co,1989, ISBN 0-7167-1987-8
10. W. Gibson, Knots and How to Tie Them, Wings Books, NY,1989, ISBN 0-517-09369-3
11. H.Rademacher and O.Toeplitz, The Enjoyment of Mathematics, Dover, 1990, ISBN 0-486-26242-1
12. I. Hargittai and M. Hargittai, Symmetry. A Unifying Concept, Shelters Publ., Inc., Bolinas, CA 1994,
13. R. Smullyan, Satan, Cantor, and Infinity, A. Knopf, NY, 1992, ISBN 0-679-40688-3
14. H. Steinhaus, Mathematical Snapshots, Oxford Univ. Press, 1983, ISBN 0-19-503267-5
15. I. Stewart and M. Golubitsky, Fearful Symmetry. Is God a Geometer?, Penguin, 1993, ISBN 0-14-013047-0
16. N. Vilenkin, In Search of Infinity, Birkhauser, Boston, 1995, ISBN 0-8176-3819-9

More challenging math problems (for advanced high school students)

1. D.Shklarsky at al., The USSR Olympiad Problem Book, Dover, 1993, ISBN 0-486-27709-7
2. C. Trigg, Mathematical Quickies, Dover, 1985, ISBN 0-486-24949-2
3. H. Steinhaus, One Hundred Problems in Elementary Mathematics, Dover, 1964, ISBN 0-486-23875-x
4. A.Yaglom and I.Yaglom, Challenging Mathematical Problems, vol.1, Dover, 1987, ISBN 0-486-65536-9
5. A.Yaglom and I.Yaglom, Challenging Mathematical Problems, vol.2, Dover, 1987, ISBN 0-486-65537-7

Probability

1. F. Mosteller, Fifty Challenging Problems, Dover, ISBN 0-486-65355-2, 1965
2. F. Mosteller, R. Rourke, and G. Thomas, Probability and Statistics, Addison-Wesley, 1971 (this book has a nice chapter on combinatorics)

Miscellaneous

1. R. Feynman, Surely You Are Joking, Mr. Feynman, Bantam Books, 1989, ISBN 0-533-34668-7 (A funny and exciting story about the life of Nobel Prize winner R. Feynman)
2. George Polya, How to Solve It. Several editions are available, e.g. Princeton Univ. Press 1982. The book by a famous mathematician discusses strategies of problem solving.
3. S. Nasar, A beautiful mind. A fascinating and well written biography of the Nobel prize winner J. Nash. A major movie is based on this book.
4. Paul Hoffman, The man who loved only numbers. A marvelous biography of one of the most unusual mathematicians of 20th century Paul Erdös.
5. The wonderful Mathematical World series of inexpensive exciting books by the American Math Society can be found at http://e-math.ams.org/bookstore/mawrldseries. Among the available volumes: Fixed points, Stories about maxima and minima, Knots and Surfaces, Groups and symmetry,

Mathematical circles, Portraits of the Earth: A Mathematician Looks at Maps, and many others.

6. Small and inexpensive very good books for high school students by I. M. Gelfand, one of the greatest living mathematicians: Algebra; Trigonometry; Functions and Graphs; The Method of Coordinates. All published by Springer Verlag, except the last one by Dover.

Some very good math textbooks for K-12

1. Japanese Math books for grades 10 – 12. Volumes 8 – 11 in the Mathematical World series by the American Math Society found at http://e-math.ams.org/bookstore/mawrldseries.
2. Singapore series of Math and Science textbooks for K-12 available at http://www.singaporemath.com/
3. C.H. Clemens, M.A. Clemens, Geometry for the Classroom. Springer Verlag. A good geometry book. Can be found used only.