

ZMATH 06675841

Fey, James T.; Smith, David A.

Algebra as part of an integrated high school curriculum.

Stewart, Sepideh (ed.), And the rest is just algebra. Cham: Springer (ISBN 978-3-319-45052-0/hbk; 978-3-319-45053-7/ebook). 119-129 (2017).

Summary: Traditional high school mathematics curricula in the United States devote 2 years almost exclusively to development of student proficiency in the symbolic manipulations required for solving algebraic equations and generating equivalent algebraic expressions. However, recent design experiments have shown that a focus on functions, mathematical modeling, and computer algebra tools enables effective integration of algebra with the other core strands of high school mathematics.

Classification: D30 H20 H30 D40 M10

Keywords: integrated curriculum; school algebra; functions; problem-based learning; mathematical modeling; applications

doi:10.1007/978-3-319-45053-7_7