

# Emphasis on mastery of basic addition, subtraction, multiplication and division facts in 3<sup>rd</sup> Grade Math texts submitted for 1999 Texas adoption

	Saxon (1997) <i>Math 3</i> 140 lessons	SRA (1999) <i>SRA Math</i> 154 lessons	Harcourt (1999) <i>Math Advantage</i> 28 chapters	Scott-Addison (1999) <i>Math</i> 12 chapters	Silver (1999) <i>The Path to Math Success</i> 12 chapters	McGraw (1999) <i>Math in My World</i> 12 chapters	Everyday Learning (1998) <i>Everyday Math</i> 120 lessons
Do student activities stress <b>automatic</b> number-fact recall, not reinvention strategies*?	<b>YES</b> Daily quizzes and basic fact practice	<b>YES</b> Daily "Mental Math" exercises practice rapid recall of basic facts. Many games are designed for fact practice.	<b>LESS EMPHASIS</b> Student text stresses reinvention strategies* (e.g., pp. 1-5, 14, 15, 68, 70, 107). Occasional, but not daily, fact-recall practice (e.g., TE, pp. 5, 16D, 204D, 210, 219, 242D). Most fact-recall practice is in back of book (TE, pp. H124A, B1-B2).	<b>SOMETIMES</b> 3 games practice multiplication facts (pp. 249, 260). Division-fact activities do not stress automaticity (p. 305). Addition and subtraction number-fact review in early chapters only.	<b>VERY RARELY</b> Much emphasis on reinvention strategies* (e.g., pp. 46, 56, 58, 230) Minimal activities for number-fact recall in student text. Only some daily "Math Minutes" cover number-fact recall.	<b>SOMETIMES</b> Student text stresses reinvention strategies* (e.g., pp. 3, 6, 33, 20). Several number-fact card games suggested (e.g., p. 211; TE, pp. xiD, 291B, 239D, 5). Brief "Daily Reviews" include only four "FAST FACTS" each.	<b>YES</b> Many number-fact games (e.g., "Beat the Calculator") and choral drills (e.g., Teacher's Reference Manual, pp. 109-110, 111, 166, 177).
Are <b>timed</b> number-fact tests or quizzes provided with instructions for use?	<b>YES</b> 45-second daily quizzes	<b>MOSTLY</b> 3- or 4-minute speed tests for addition, subtraction and multiplication (pp. 38, 176, 177 and TE, p. 36) but division-fact test is not timed (p. 192).	<b>AVAILABLE, OPTIONAL</b> Number-fact tests of 80 problems each are more extensive than in the SRA, but with no <i>specific</i> time suggested [TE, p. H121-H124 (tests); TE, p. H124A (Ideas for using tests)].	<b>NO</b> Tests are not timed and include few number facts.	<b>SOMETIMES</b> Daily "Math Minutes" (many of 5 or 6 basic facts) are timed but are far fewer than in Saxon. "Checkpoints" on multiplication and division facts are not timed (pp. 224, 350).	<b>NO</b> Tests are not timed and include few number facts. The four "FAST FACTS" in each "Daily Review" lack suggested time limits or instructions for use.	<b>NO</b> See <i>Teacher's Manual &amp; Lesson Guide</i> , p. 145, par. 3 — p. 146, top of page.
Does the Teacher's Edition (TE) stress importance of <b>automatic</b> recall of number facts?	<b>YES</b> See TE, p. v, par. 2, lines 1-4.	<b>YES</b> See TE, p. T25.	<b>AMBIGUOUS</b> TE is ambivalent on automaticity. Contrast TE, p. E4, col. 2, par. 6, and TE, p. E15, col. 2, par. 2, lines 1-3 with TE, p. E15, col. 2, par. 3, lines 6-8 and TE, p. H124A, col. 1, par. 1, lines 1-3.	<b>NO</b> "Students may want to use calculators to solve all the addition problems. For exercises 2a-2f suggest that students use them only to check their work." — TE, p. 96B, col. 1, par 2	<b>NO</b> "Focus on the process of finding an answer, not the answer itself." — TE, p. xvii	<b>NO</b> "... there are many ways to find sums; [students] should choose the way they think is easiest." — TE, p. 9, right margin, lines 2-4	<b>CONTRADICTIONARY</b> Contrast <i>Teacher's Reference Manual</i> , p. 125, par. 4 with <i>Teacher's Reference Manual</i> , p. 109, par. 1-3.
<b>OVERALL rating:</b>	↑ <b>best</b>	↑ <b>very good</b>	↑ <b>fair</b>	↑ <b>poor</b>	↑ <b>poor</b>	↑ <b>very poor</b>	↑ <b>worst</b>

\* "Reinvention strategies" include "count on," "make a ten," "use doubles," "count back," "count up," "draw an array," "skip count," "use models," and "find patterns."