# Extent of calculator dependence in $6^{\text {th }}$ grade Math texts approved for 2007 local Texas adoption 

SE = Student Edition; $\mathrm{TE}=$ Teacher's Edition; Numbers in bold italics indicate TE.

## Nonconforming

|  | SAXON MATH Course 1 (Harcourt Achieve, 2007) | MATH Course 1 (McDougal, 2007) | HOLT MATH <br> Course 1 <br> (Holt, 2007) | $\begin{gathered} \text { TEXAS MATH } \\ \text { Course } 1 \\ \text { (Prentice, 2008) } \\ \hline \end{gathered}$ | TEXAS MATH Course 1 (Glencoe, 2007) | EVERYDAY MATH <br> (McGraw, 2004) | CONNECTED MATH 2 <br> (Prentice, 2008) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Stated policy on calculator use | No stated policy; 9 SE pages suggest calculator use; text 4 times refers students to the Saxon website for graphing calculator activities | Calculation treated as <br> " 'practice makes perfect' " not as <br> " 'something best left to calculators' " (p. T52); calculator use usually limited to one "Technology Activity" per chapter | "Choose a solution method and solve .... You could use paper and pencil. But finding a product of 3-digit numbers requires several steps. Using a calculator will probably be faster." p. 31 | "Students ... expected to use graphing technology ... no longer limited to four-function calculators." p. T26 "Will you use estimation, mental math, paper and pencil, or a calculator ...? " Sample answer: "calculator because it is faster" p. 15, \#31 | "Use a calculator if an exact answer is needed and the calculations are not simple enough to perform mentally and have fairly large numbers." p. 642, \#12-5 Pp. 8-9 give detailed instruction on use of graphing calculator. Also see pp. 10, 51. | "... calculators ... free both students and teachers from having to spend so much time on dull, repetitive, and unproductive tasks." Teacher's Reference Manual, p. 35, lines 1-3 | "... we assume that students have access to calculators at all times. However, we hope that students will develop good estimation and mental arithmetic skills." Prime Time, p. 16, col. 2, par. 3, <br> "A Note on Calculators" |
| How often does the text suggest calculator use for ... |  |  |  |  |  |  |  |
| multiplying by a 2- or 3-digit number? | not mentioned in SE (A few TE extension problems with very large numbers suggest calculator use.) | for 2 problems pp. 24, 37 | $\begin{gathered} \text { for } 13 \text { problems } \\ \text { pp. } 31,32,49, \\ 150,550,715 \end{gathered}$ | for 11 problems pp. 41,42 | for 3 problems pp. 9, 11 | Actual amount of calculator use in "Games" component is indeterminate, but the main student workbook (Math Journal) and other student worksheets (Math Masters) direct students not to use calculators about $3 / 7$ of the time. Calculator use is always acceptable unless there is a <br> "No Calculator" icon. | Does not "designate specific 'calculator problems' " because calculators should be available "at all times" (see above) and "students should learn when their use is appropriate" (Prime Time p. 13, col. 1, par. 1); Exception: Bits \& Pieces I, II, and III all encourage students to work without calculators when first learning fraction and decimal operations. |
| adding 3-digit or larger numbers? | for 1 problem Performance Activity 4 p. $135 B$ | for 7 problems pp. 155, 155 | for 3 problems <br> p. 150 | not mentioned | for 4 problems pp. 104, 105, 693 |  |  |
| finding decimal value of fractions? | for 4 problems <br> pp. 386, 387 | for 18 problems p. 276 | for 5 problems <br> p. 389,389 | for 9 problems pp. 280, 342, 343 | for 30 problems <br> pp. 208-210, 210 |  |  |
| finding circumference? | not expected | for 12 problems pp. 530, 530 | not mentioned | for 11 problems pp. 440, 441, 441 | for 22 problems pp. 490-493, 490, 504, 505, 522, 536, 686 |  |  |
| finding numerical equivalents of exponential expressions? | not expected | for 31 problems pp. 17, 20, 24 | not mentioned | not mentioned | for 26 problems <br> pp. 9, 33-34 |  |  |
| finding the mean? | not expected | not expected | not mentioned | not mentioned | for 11 problems pp. 104, 105, 112, 113 |  |  |
| checking paper-andpencil answers? | for 13 problems <br> pp. 226, 346, <br> 386, 438, 608 | not expected | for 12 problems p. 21 | not mentioned | for 58 problems <br> pp. 208, 535-537 |  |  |
| other mathematical operations? | $\begin{gathered} \text { for } 16 \text { problems } \\ \text { pp. } \mathbf{1 0 8}, 231,232,244,245, \\ \mathbf{2 7 4}, 437,462,469,608 \end{gathered}$ | for 87 problems pp. 24, 37, 155, 155, 385, 441, 441, 602, 667, 688 | for 36 problems pp. 31, 32, 32, 36, 39, 44, 57, 177, 187, 389, 389 | for 79 problems <br> pp. 15, 35, 78, 180, 237, 281, <br> 345, 437, 547, 570D, 586, 588, <br> 589, 590, 592-595, 599, 600 | for 91 problems <br> pp. 9, 26, 27, 48, 53, 104, 112, <br> 113, 164, 209-210, 288, 314, 479, <br> 487, 512, 522, 549, 607, 611, 693 |  |  |
| Total suggested calculator use | Suggested for 34 problems, not expected elsewhere | Stipulated for 157 problems, not expected elsewhere | Stipulated for 69 problems, accepted elsewhere | Stipulated for 110 problems, accepted elsewhere | Stipulated for 245 problems, accepted elsewhere | About 57\% (4/7) of the time overall | Encouraged for most problems |

