

NOTE: The number for each skill indicates the suggested grade level in which to teach it. Any errors in the process for a skill indicate the need to teach it. Fact errors are not really relevant, but if frequent, indicate the need for more Rocket Math facts practice.

**SKILL 1b: Subtracting 1 or 2 digits from 2 digits; no renaming.**

$$\begin{array}{r} 49 \\ -16 \\ \hline 33 \end{array}$$

$$\begin{array}{r} 65 \\ - 4 \\ \hline 61 \end{array}$$

$$\begin{array}{r} 84 \\ -52 \\ \hline 32 \end{array}$$

**SKILL 2a: Subtracting 1 or 2 digits from 2 digits; renaming required.**

$$\begin{array}{r} 4 \\ \cancel{5}^1 7 \\ -38 \\ \hline 19 \end{array}$$

$$\begin{array}{r} 2 \\ \cancel{3}^1 4 \\ - 9 \\ \hline 25 \end{array}$$

$$\begin{array}{r} 6 \\ \cancel{7}^1 2 \\ -26 \\ \hline 46 \end{array}$$

**SKILL 2b: Subtracting 1, 2, or 3 digits from 3 digits; borrowing tens to ones.**

$$\begin{array}{r} 2 \\ \cancel{1}^1 3 \cancel{8} \\ - 9 \\ \hline 129 \end{array}$$

$$\begin{array}{r} 7 \\ \cancel{6}^1 8 \cancel{3} \\ - 58 \\ \hline 625 \end{array}$$

$$\begin{array}{r} 547 \\ -424 \\ \hline 123 \end{array}$$

**SKILL 3a: Subtracting 2 or 3 digits from 3 digits; borrowing from hundreds to tens.**

$$\begin{array}{r} 3 \\ \cancel{4}^1 5 \cancel{7} \\ - 74 \\ \hline 383 \end{array}$$

$$\begin{array}{r} 6 \\ \cancel{7}^1 2 \cancel{8} \\ -356 \\ \hline 372 \end{array}$$

$$\begin{array}{r} 348 \\ -237 \\ \hline 111 \end{array}$$

**SKILL 3b: Subtracting 2 or 3 digits from 3 digits; borrowing twice.**

$$\begin{array}{r} 6 \quad 12 \quad 1 \\ \cancel{7}^1 \cancel{3}^1 5 \\ -286 \\ \hline 449 \end{array}$$

$$\begin{array}{r} 4 \quad 12 \\ \cancel{5}^1 \cancel{3}^1 2 \\ -257 \\ \hline 275 \end{array}$$

$$\begin{array}{r} 2 \quad 14 \\ \cancel{3}^1 \cancel{5}^1 3 \\ - 68 \\ \hline 285 \end{array}$$

**SKILL 3c: Subtracting tens minus one facts.**

$$10 - 1 = \underline{9} \quad 20 - 1 = \underline{19}$$

$$90 - 1 = \underline{89} \quad 40 - 1 = \underline{39}$$

$$30 - 1 = \underline{29} \quad 60 - 1 = \underline{59}$$

**SKILL 3d: Subtracting 2 or 3 digits from 3 digits; zero in tens column; borrowing tens to ones and/or hundreds to tens.**

$$\begin{array}{r} 5 \quad 9 \quad 1 \\ \cancel{6}^1 \cancel{0}^1 1 \\ -487 \\ \hline 114 \end{array}$$

$$\begin{array}{r} 4 \quad 1 \\ \cancel{5}^1 0 4 \\ -243 \\ \hline 261 \end{array}$$

$$\begin{array}{r} 6 \quad 9 \quad 1 \\ \cancel{7}^1 \cancel{0}^1 2 \\ -538 \\ \hline 164 \end{array}$$

**SKILL 3e: Reading and writing thousands numbers, using commas.**

a) Student reads to you. b) Dictate so student can write.

1a) 734,586    b) 264,137

2a) 506,320    b) 803,940

3a) 750,000    b) 280,000

4a) 300,702    b) 500,403

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**SKILL 3f: Subtracting 3 or 4 digits from 4 digits; borrowing from thousands to hundreds.**

$$\begin{array}{r} \overset{8}{\cancel{9}}386 \\ - 6473 \\ \hline 2,913 \end{array} \quad \begin{array}{r} \overset{6}{\cancel{7}}375 \\ - 4863 \\ \hline 2,512 \end{array} \quad \begin{array}{r} \overset{5}{\cancel{6}}447 \\ - 1632 \\ \hline 4,815 \end{array}$$

**SKILL 3g: Subtracting 2, 3 or 4 digits from 4 digits; borrowing in one or more columns.**

$$\begin{array}{r} \overset{6}{\cancel{4}}\overset{11}{\cancel{2}}3 \\ - 497 \\ \hline 4,226 \end{array} \quad \begin{array}{r} \overset{5}{\cancel{3}}2\overset{1}{\cancel{6}}4 \\ - 36 \\ \hline 3,228 \end{array} \quad \begin{array}{r} \overset{4}{\cancel{5}}4\overset{3}{\cancel{4}}5 \\ - 2918 \\ \hline 2,527 \end{array}$$

**SKILL 4a: Subtracting 2, 3 or 4 digits from 4 digits; zero in either tens or 100s column.**

$$\begin{array}{r} \overset{5}{\cancel{6}}\overset{1}{\cancel{2}}\overset{9}{\cancel{0}}3 \\ - 3989 \\ \hline 2,214 \end{array} \quad \begin{array}{r} \overset{6}{\cancel{7}}\overset{9}{\cancel{0}}\overset{12}{\cancel{3}}\overset{1}{\cancel{2}} \\ - 1355 \\ \hline 5,677 \end{array} \quad \begin{array}{r} \overset{4}{\cancel{5}}\overset{9}{\cancel{0}}\overset{10}{\cancel{1}}6 \\ - 797 \\ \hline 4,219 \end{array}$$

**SKILL 4b: Subtracting 2, 3 or 4 digits from 4 digits; zero in tens column and a 1 in the 100s column.**

$$\begin{array}{r} \overset{3}{\cancel{4}}\overset{10}{\cancel{1}}\overset{9}{\cancel{0}}\overset{1}{\cancel{2}} \\ - 2579 \\ \hline 1,523 \end{array} \quad \begin{array}{r} \overset{4}{\cancel{5}}\overset{10}{\cancel{1}}\overset{9}{\cancel{0}}\overset{3}{\cancel{3}} \\ - 3318 \\ \hline 1,785 \end{array} \quad \begin{array}{r} \overset{8}{\cancel{9}}\overset{10}{\cancel{1}}\overset{9}{\cancel{0}}\overset{5}{\cancel{5}} \\ - 927 \\ \hline 8,178 \end{array}$$

**SKILL 4c: Subtracting hundreds minus 1 facts.**

$$\begin{array}{r} 100 - 1 = \underline{99} \\ 200 - 1 = \underline{199} \\ 600 - 1 = \underline{599} \end{array} \quad \begin{array}{r} 500 - 1 = \underline{499} \\ 700 - 1 = \underline{699} \\ 300 - 1 = \underline{299} \end{array}$$

**SKILL 4d: Subtracting 2, 3, or 4 digits from 4 digits; zero in tens and hundreds column.**

$$\begin{array}{r} \overset{7}{\cancel{8}}\overset{9}{\cancel{0}}\overset{9}{\cancel{0}}\overset{1}{\cancel{2}} \\ - 7753 \\ \hline 249 \end{array} \quad \begin{array}{r} \overset{3}{\cancel{4}}\overset{9}{\cancel{0}}\overset{9}{\cancel{0}}\overset{1}{\cancel{0}} \\ - 165 \\ \hline 3,835 \end{array} \quad \begin{array}{r} \overset{1}{\cancel{2}}\overset{9}{\cancel{0}}\overset{9}{\cancel{0}}\overset{1}{\cancel{8}} \\ - 39 \\ \hline 1,969 \end{array}$$

**SKILL 4e: Subtracting 1, 2, or 3 digits from 1000.**

$$\begin{array}{r} \overset{0}{\cancel{1}}\overset{9}{\cancel{0}}\overset{9}{\cancel{0}}\overset{1}{\cancel{0}} \\ - 329 \\ \hline 671 \end{array} \quad \begin{array}{r} \overset{0}{\cancel{1}}000 \\ - 900 \\ \hline 100 \end{array} \quad \begin{array}{r} \overset{0}{\cancel{1}}\overset{9}{\cancel{0}}\overset{9}{\cancel{0}}\overset{1}{\cancel{0}} \\ - 56 \\ \hline 944 \end{array}$$

**SKILL 4f: Subtracting 5- and 6-digit numbers with borrowing.**

$$\begin{array}{r} \overset{4}{\cancel{5}}\overset{1}{\cancel{4}}, \overset{3}{\cancel{4}}\overset{1}{\cancel{4}}\overset{3}{\cancel{6}} \\ - 39,157 \\ \hline 15,289 \end{array} \quad \begin{array}{r} \overset{7}{\cancel{2}}\overset{12}{\cancel{8}}, \overset{11}{\cancel{2}}\overset{1}{\cancel{1}}\overset{1}{\cancel{9}} \\ - 29,873 \\ \hline 253,346 \end{array}$$

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**SKILL 5a: Subtracting thousands minus 1 facts.**

$$1000 - 1 = \underline{999} \quad 3000 - 1 = \underline{2,999}$$

$$8000 - 1 = \underline{7,999} \quad 5000 - 1 = \underline{4,999}$$

$$4000 - 1 = \underline{3,999} \quad 7000 - 1 = \underline{6,999}$$

**SKILL 5b: Subtracting from a number with four zeroes.**

$$\begin{array}{r} \overset{3}{4} \overset{9}{0} \overset{9}{0} \overset{9}{0} \overset{1}{0} \\ - 8,753 \\ \hline 31,247 \end{array}$$

$$\begin{array}{r} \overset{5}{6} \overset{9}{0} \overset{9}{0} \overset{9}{0} \overset{1}{0} \\ - 876 \\ \hline 59,124 \end{array}$$

$$\begin{array}{r} \overset{0}{1} \overset{9}{0} \overset{9}{0} \overset{1}{0} \\ - 4,760 \\ \hline 5,240 \end{array}$$