

To the Student (and Parent)

Sixth grade is an important year for developing math skills. All your work on math this year will help to prepare you for studying math in seventh grade, eighth grade, and in high school. How good you will become at math depends less on natural ability and more on your effort, determination, and organizational skills. Even students who feel that they aren't good at math can catch up by putting forth some extra effort. Don't give up! Almost anyone can become good at math if they really want to!

Here are some tips on how to use this workbook successfully:

- Make sure your work is readable and easy to follow.
- If there isn't enough room on the worksheet, then show your work on a separate sheet of paper, making sure you write down the worksheet number and problem number, so you can easily find it later.
- If you get stuck on one problem, then go on to another problem, and come back later to the one that you were stuck on.
- While working on a problem from one worksheet, it may be helpful to refer back to a problem that you did on a previous worksheet.
- *Fractions.* All answers to fraction problems should be reduced. Don't give answers as improper fractions, but, instead, convert them to mixed numbers (for example, leave your final answer as $3\frac{1}{4}$ instead of $\frac{13}{4}$).
- *Division.* Answers for division problems may be rounded to three significant digits, unless the problem states you should leave your answer as an exact decimal, in which case you must continue until it repeats or ends. For example, $2579 \div 56$ has an exact answer of 46.053571428 . Rounding it to three significant digits means that we go only as far as the fourth digit (which is the second place after the decimal point, and is a 5 in this case), and then round up the previous digit for an answer of 46.1.
- *Answers involving time.* Answers requiring a measure of time should be given in separated units. Examples of this are: 1 day 6 hours instead of 1.25 days and 3 hours 12 minutes instead of 3.2 hours.
- *Math Tricks.* A list of the math tricks can be found at the back of this workbook.
- Above all, homework is for learning! Try your best on every problem. Struggling and overcoming frustration are part of the process of doing math. Even if you don't get a problem correct, you will learn by trying it, and then, later, learn by seeing a correct solution. Do not fall into the trap of doing the homework just to get it done.
- *Learn from your mistakes!* When you get a problem wrong, make sure you follow up on it; find your mistake, and learn how to do the problem correctly.

Getting Help. The problems in this workbook are based upon the material found in our curriculum book, titled: *A Middle School Math Curriculum for Teachers and Parents*, which can be purchased at www.JamieYorkPress.com. The book has helpful explanations and examples, and is useful for parents (or tutors) who are helping their children with the worksheets found in this workbook.

6th Grade Math – Sheet #1

Do it in your head.

- 1) $80 \cdot 70$
- 2) $400 \cdot 60$
- 3) $5000 \cdot 400$
- 4) $120 \cdot 7$
- 5) $1100 \cdot 7000$
- 6) $3600 \div 900$
- 7) $42,000 \div 70$
- 8) $720,000 \div 120,000$
- 9) $48,000 \div 8$
- 10) $54 + 8$
- 11) $60 - 13$
- 12) $73 + 24$
- 13) $700 - 8$
- 14) $687 + 36$
- 15) $4000 - 38$

Arithmetic.

Show your work.

- 16)
$$\begin{array}{r} 5674 \\ - 839 \\ \hline \end{array}$$
- 17)
$$\begin{array}{r} 64008 \\ - 28285 \\ \hline \end{array}$$

18)

$$\begin{array}{r} 782 \\ \times 539 \\ \hline \end{array}$$

19)

$$\begin{array}{r} 587900 \\ \times 76300 \\ \hline \end{array}$$

20)

$$\begin{array}{r} 375 \\ 684 \\ 39 \\ 865 \\ 421 \\ 997 \\ + 516 \\ \hline \end{array}$$

Fractions.

- 21) $\frac{3}{11} + \frac{4}{11}$
- 22) $\frac{3}{8} + \frac{1}{2}$
- 23) $\frac{7}{12} - \frac{1}{12}$
- 24) $\frac{2}{3} \cdot \frac{3}{5}$
- 25) $\frac{3}{8} \cdot \frac{6}{7}$
- 26) $\frac{11}{12} \div \frac{2}{3}$
- 27) $\frac{5}{16} + \frac{1}{4}$
- 28) $\frac{7}{12} - \frac{1}{4}$
- 29) $\frac{45}{49} \cdot \frac{21}{25}$

$$30) \quad \frac{3}{16} + \frac{7}{12}$$

Reduce each fraction.

$$31) \quad \frac{6}{9}$$

$$32) \quad \frac{30}{120}$$

$$33) \quad \frac{35}{49}$$

$$34) \quad \frac{24}{60}$$

$$35) \quad \frac{36}{270}$$

$$36) \quad \frac{175}{225}$$

$$37) \quad \frac{540}{2880}$$

Division.

Hints:

- The second number goes outside “the house”.
- All division problems on this sheet work out exactly.

$$38) \quad 3456 \div 6$$

$$39) \quad 48424 \div 8$$

$$40) \quad 5394 \div 62$$

$$41) \quad 49441 \div 49$$