

math

# MAMMOTH

## Math Mammoth Grade 4 Review Workbook

**A**ddition, subtraction,  
patterns, and graphs

**L**arge numbers and place value

**M**ulti-digit  
multiplication

**T**ime and  
measuring

**D**ivision

**G**eometry

**F**ractions

**D**ecimals



By Maria Miller

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# Math Mammoth Grade 4 Review Workbook

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## Introduction

This workbook is intended to give students a thorough review of 4th grade math. It has both topical as well as mixed (spiral) review worksheets, and includes both topical tests and a comprehensive end-of-the-year test. The tests can also be used as review worksheets, instead of tests.

You can use this workbook for example to prepare students who are going into fifth grade, or give fourth grade students extra practice with a variety of problems.

The topics reviewed in this workbook are:

- Addition, subtraction, patterns, and graphs
- Large numbers and place value
- Multi-digit multiplication
- Time and measuring
- Division
- Geometry
- Fractions and decimals

In addition to the topical reviews and tests, the workbook also contains over two dozen cumulative (spiral) review pages.

The content for these is taken from *Math Mammoth Grade 4 Complete Curriculum*, so naturally this workbook works especially well to prepare students for grade 5 in Math Mammoth. However, the content follows a typical study for grade 4, so this workbook can be used no matter which math curriculum you follow.

Please note this book does not contain lessons or instruction for the topics. It is not intended for initial teaching. It also will not work if the student needs to completely re-study these topics (the student has not learned the topics at all). For that purpose, please consider *Math Mammoth Grade 4 Complete Curriculum*, which has all the necessary instruction and lessons.

*I wish you success with math teaching!*  
*Maria Miller, the author*

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## Large Numbers and Place Value Test

1. Write the numbers.

a. 400 thousand 40	b. 4 thousand 5 hundred 60 thousand	c. 200 thousand 7 ones 6 tens
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2. What is the value of the digit 8 in the following numbers?

a. 280,340

b. 294,487

3. Round the numbers to the underlined place value unit.

a. 516, <u>7</u> 64 $\approx$	b. 29 <u>3</u> ,477 $\approx$	c. 1 <u>9</u> 6,045 $\approx$
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4. Calculate  $225,390 - 17,692$ .

5. Write the numbers in order from the smallest to the greatest.

39,294   3,294   93,294   39,244   399,295

6. The king of Sookiland has 24,000 gold coins in each of his three treasuries, plus an additional 1,382 coins in a chest. The king of Nootyland owns a total of 78,600 gold coins. Which king has more coins? How many more?

7. A charitable organization has one million dollars from which they are giving \$1,000-grants to students. How many students can receive the grant?

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# Multi-Digit Multiplication Review

1. Multiply.

<b>a.</b> $400 \times 3 = \underline{\hspace{2cm}}$ $9 \times 20 = \underline{\hspace{2cm}}$	<b>b.</b> $70 \times 60 = \underline{\hspace{2cm}}$ $300 \times 11 = \underline{\hspace{2cm}}$	<b>c.</b> $90 \times 900 = \underline{\hspace{2cm}}$ $100 \times 400 = \underline{\hspace{2cm}}$
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2. Find the missing factor. Think of how many zeros you need.

<b>a.</b> $\underline{\hspace{2cm}} \times 50 = 4,000$ $\underline{\hspace{2cm}} \times 50 = 350$	<b>b.</b> $70 \times \underline{\hspace{2cm}} = 280$ $7 \times \underline{\hspace{2cm}} = 2,800$	<b>c.</b> $\underline{\hspace{2cm}} \times 40 = 12,000$ $\underline{\hspace{2cm}} \times 800 = 64,000$
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3. Solve the equations.

<b>a.</b> $4 \times 30 = \underline{?} \times 3$ $\underline{?} = \underline{\hspace{2cm}}$	<b>b.</b> $y \times 500 = 250 \times 4$ $y = \underline{\hspace{2cm}}$	<b>c.</b> $450 + 350 = \triangle \times 20$ $\triangle = \underline{\hspace{2cm}}$
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4. Solve this problem using **estimation**.

If you earn \$515 weekly, in how many weeks will you have earned more than \$4,000?

5. Multiply. Estimate the answer on the line.

<b>a.</b> $7 \times 48$ $\approx \underline{\hspace{2cm}}$ <div style="border: 1px solid black; width: 100%; height: 100%; margin-top: 10px;"> <table style="width: 100%; height: 100%; border-collapse: collapse;"> <tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr> <tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr> <tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr> <tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; 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6. Fill in the table.

<b>Roses</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>
<b>Price</b>	<b>\$0.90</b>							

7. Calculate in the right order.

$$2 \times 98 - 8 \times 17$$


8. Solve.

a.  $(1,500 - 1,000) \times 4 = \underline{\hspace{2cm}}$

b.  $(76 + 34) \times 2 \times 0 = \underline{\hspace{2cm}}$

c.  $8 \times 2 \times (3 + 2) = \underline{\hspace{2cm}}$

d.  $200 \times (500 - 400) = \underline{\hspace{2cm}}$

9. Draw a many-part rectangle to illustrate the multiplications. You do not have to measure the sides to make them exactly so long, a sketch is good enough.

a.  $8 \times 24$

$$= \underline{\hspace{1cm}} \times \underline{\hspace{1cm}} + \underline{\hspace{1cm}} \times \underline{\hspace{1cm}}$$

$$= \underline{\hspace{2cm}}$$

b.

$$\begin{array}{r} 35 \\ \times 39 \\ \hline \end{array}$$

$$+ \underline{\hspace{2cm}}$$

10. Solve. Write a number sentence for each one, not just the answer.

a. A store owner bought 50 boxes of shirts, with 20 shirts in each box, and each shirt costs \$2. What was his total bill?

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b. Dad bought 8 boxes of nails for \$2.35 a box. What was his change from \$20?

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c. Charlene bought five ice cream cones for \$1.50 each. Now she has \$12.50 left. How much did she have originally?

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d. Jan bought six coconuts for \$1.28 each and seven pineapples for \$2.15 each. What was her total bill?

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e. A huge roll of wrapping paper costs \$45 but it was discounted by \$8. How much do five rolls cost?

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f. A gazelle can run nine miles in 15 minutes. How far could it run in 10 minutes?


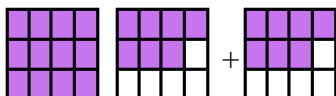
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## Mixed Review 13

1. Write an addition sentence. Give your answer as a mixed number.

<p>a. </p>	<p>b. </p>
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2. Multiply.

a. $10 \times \frac{5}{12}$	b. $\frac{4}{9} \times 7$	c. $\frac{14}{100} \times 3$
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3. Find all the factors of the numbers.

a. 38	b. 56	c. 19
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4. Multiply. Estimate the answer on the line.

<p>a. <math>6 \times 292</math></p> <p><math>\approx</math> _____</p> <div style="border: 1px solid black; width: 100%; height: 100%; position: relative;"> <div style="position: absolute; bottom: 0; left: 0; right: 0; border-top: 2px solid black;"></div> </div>	<p>b. <math>11 \times 402</math></p> <p><math>\approx</math> _____</p> <div style="border: 1px solid black; width: 100%; height: 100%; position: relative;"> <div style="position: absolute; bottom: 0; left: 0; right: 0; border-top: 2px solid black;"></div> </div>	<p>c. <math>3 \times 2,364</math></p> <p><math>\approx</math> _____</p> <div style="border: 1px solid black; width: 100%; height: 100%; position: relative;"> <div style="position: absolute; bottom: 0; left: 0; right: 0; border-top: 2px solid black;"></div> </div>	<p>d. <math>7 \times 8,827</math></p> <p><math>\approx</math> _____</p> <div style="border: 1px solid black; width: 100%; height: 100%; position: relative;"> <div style="position: absolute; bottom: 0; left: 0; right: 0; border-top: 2px solid black;"></div> </div>
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5. Solve the equations.

<p>a. <math>90 \times \triangle = 8,100</math></p> <p><math>\triangle =</math> _____</p>	<p>b. <math>500 \times ? = 2 \times 1,000</math></p> <p><math>? =</math> _____</p>	<p>c. <math>4 \times 3 \times y = 360</math></p> <p><math>y =</math> _____</p>
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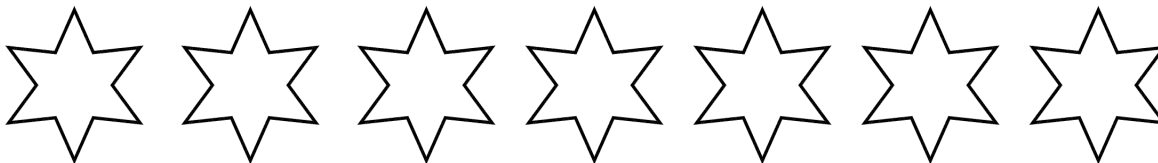
6. Change the 24-hour times to the a.m. / p.m. times.

<b>a.</b> 14:30 ____ : ____	<b>b.</b> 19:15 ____ : ____	<b>c.</b> 22:45 ____ : ____	<b>d.</b> 7:50 ____ : ____
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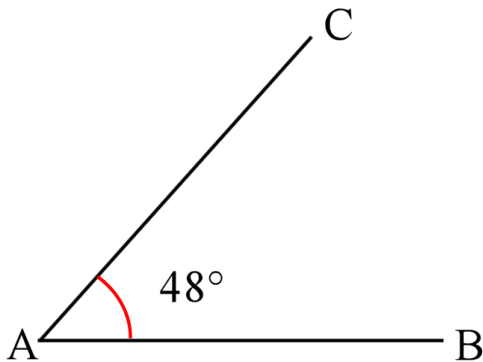
7. Mom promised to pay one-fourth of the price of a new bicycle for Terry, which costs \$95.00. Draw a bar diagram about the situation, and find how much Mom and Terry each paid.

8. Jack has paid for  $\frac{3}{5}$  of the \$600-computer he bought. How many dollars does he still have to pay?

9. Draw as many different symmetry lines as you can into this shape.



10. **a.** Draw a  $35^\circ$  angle using B as vertex, and AB as one side of the angle. If you do it right, the other side of your angle will intersect (cross) the line segment AC so that you will get a triangle.



**b.** Measure the third angle of the triangle.