Simply

Good and Beautiful

MATH 4

ANSWER KEY

The Good and the Beautiful

CURRICULUM

Hexagonal Honeycombs

Starting at the circled 3, use skip counting by 3s to color in every third hexagon on the first honeycomb.

On the second honeycomb, start at the circled 6 and use skip counting by 6s to color in every sixth hexagon.

Starting at the circled 9, use skip counting by 9s to color in every ninth hexagon on the third honeycomb.

Look at the numbers you colored in the last honeycomb. Which number pattern do they follow?

EVEN, EVEN, EVEN, EVEN

EVEN, ODD, EVEN, ODD

Lesson Practice

1. Write a sequence by skip counting by 7s.

7, 14, 21, 28, 35, 42, 49, 56, 63

2. Circle the correct pattern for the sequence above.

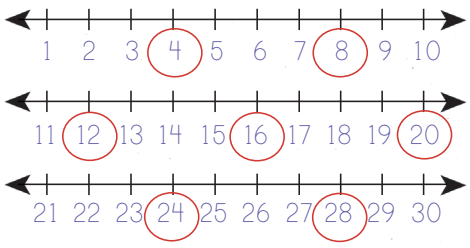
EVEN, EVEN, EVEN, EVEN EVEN, ODD, EVEN, ODD

3. Fill in the missing numbers for the following sequence:

8, 16, 24, 32, 40, 48, 56, 64, 72, 80, 88

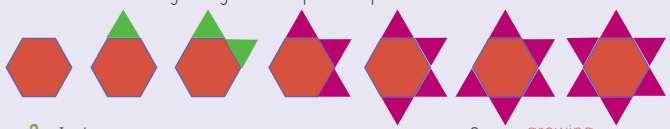
4. Write the minutes around the outside of the clock by skip counting by 5s. The first two have been done for you.

5. Circle the numbers on the number lines that follow the pattern of skip counting by 4s.



Review

1. Continue adding triangles to complete the pattern.



2. Is this pattern a growing pattern or a repeating pattern? growing

3. Complete the multiplication problems.

1 × 9 = 9	3 × 1 = 3	8 × 1 = 8	1 × 1 = 1	5 × 1 = 5	1 × 7 = 7	1 × 0 = 0	2 × 1 = 2

Let's finish our addition review by adding dollars and cents. Look at this problem:

$$\begin{array}{r} \$15.32 \\ +\ \$\ 7.64 \\ \hline \end{array}$$

When adding money, always line up the decimal points and include the dollar signs. You can then add, starting on the right.

$$\begin{array}{r} {\scriptstyle 1} \\ \$15.32 \\ +\ \$\ 7.64 \\ \hline 22.96 \end{array}$$

Don't forget! When adding money, you need to write a decimal point and a dollar or a cent sign in the answer.

$$\begin{array}{r} {\scriptstyle 1} \\ \$15.32 \\ +\ \$\ 7.64 \\ \hline \$22.96 \end{array}$$

Do you still have questions after reading the mini lesson? Watch (or rewatch) the video!

Lesson Practice

1. Circle the addends in each problem, and then find the sum.

$$\begin{array}{r} 22 \\ +\ 13 \\ \hline 35 \end{array} \qquad \begin{array}{r} 234 \\ +\ 61 \\ \hline 295 \end{array} \qquad \begin{array}{r} 124 \\ +\ 40 \\ \hline 164 \end{array}$$

2. Use the commutative property to rewrite this equation by changing the order of the addends.

$23 + 15 = 38$

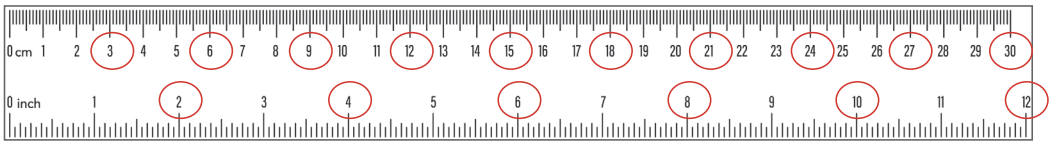
$15 + 23 = 38$

3. Complete the problems.

$$\begin{array}{r} 351 \\ +\ 178 \\ \hline 529 \end{array} \qquad \begin{array}{r} 34 \\ +\ 29 \\ \hline 63 \end{array} \qquad \begin{array}{r} \$49.42 \\ +\ \$\ 6.37 \\ \hline \$55.79 \end{array} \qquad \begin{array}{r} 126 \\ +\ 103 \\ \hline 229 \end{array} \qquad \begin{array}{r} \$24.61 \\ +\ \$\ 8.63 \\ \hline \$33.24 \end{array}$$

Review

1. On the centimeter side, skip count by 3s and circle the numbers. On the inch side, skip count by 2s and circle the numbers.



2. You and your best friend are each baking cupcakes to sell together this weekend at the farmers market. You baked 36 strawberry cream cupcakes, and your best friend baked 48 double chocolate cupcakes. How many cupcakes will you have altogether to sell this weekend? Show your work in the box to the right.

$$\begin{array}{r} 36 \\ +\ 48 \\ \hline \end{array}$$

84 cupcakes

3. You plan to sell each cupcake for $4. Continue this skip counting number pattern to determine how much money you will have after selling 13 cupcakes.

$4, $8, $12, $16, $20, $24, $28, $32, $36, $40, $44, $48, $52

4. On Saturday you and your friend added up all the money you made. After paying your moms back for groceries to make the cupcakes, you had $47.24 and your friend had $54.47. How much money did you and your friend make together?

$$\begin{array}{r} \$47.24 \\ +\ \$54.47 \\ \hline \$101.71 \end{array}$$

5. Label the hours on the clock from 1 to 12, and then draw the hour and minute hands to show 9:15.

6. Circle the even numbers and cross out the odd.

~~5~~ (384) ~~8,971~~ ~~1~~ (222) (6) (50)

(20,484) ~~1,003~~ ~~5,007~~ (528) ~~4,979~~

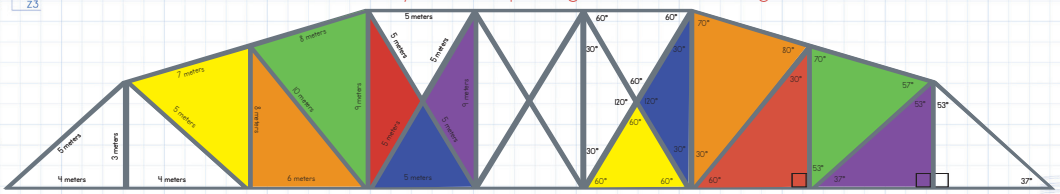
7. Complete the multiplication problems.

$$\begin{array}{r} 2 \\ \times\ 9 \\ \hline 18 \end{array} \qquad \begin{array}{r} 4 \\ \times\ 2 \\ \hline 8 \end{array} \qquad \begin{array}{r} 6 \\ \times\ 2 \\ \hline 12 \end{array} \qquad \begin{array}{r} 2 \\ \times\ 3 \\ \hline 6 \end{array}$$

$$\begin{array}{r} 2 \\ \times\ 5 \\ \hline 10 \end{array} \qquad \begin{array}{r} 8 \\ \times\ 2 \\ \hline 16 \end{array} \qquad \begin{array}{r} 2 \\ \times\ 2 \\ \hline 4 \end{array} \qquad \begin{array}{r} 2 \\ \times\ 0 \\ \hline 0 \end{array}$$

BUILDING BRIDGES

Answers will vary. An example is given for each triangle.



This bridge has many different types of triangles. The triangles on the left side of the bridge show side lengths. The triangles on the right side of the bridge show angle measures. Find each type of triangle described below and, using colored pencils, color one triangle on the bridge for each description.
NOTE: Triangles may not be drawn to scale.

By Side

This **SCALENE** triangle has two sides that measure 10 meters and 9 meters. Color this triangle GREEN.

This **ISOSCELES** triangle has two sides that measure 5 meters. Color this triangle RED.

This **EQUILATERAL** triangle has equal sides that measure 5 meters. Color this triangle BLUE.

This **SCALENE** triangle has two sides that measure 7 meters and 8 meters. Color this triangle YELLOW.

This **SCALENE** triangle has two sides that measure 6 meters and 8 meters. Color this triangle ORANGE.

This **ISOSCELES** triangle has two sides that measure 5 meters. Color this triangle PURPLE.

By Angle

This **ACUTE** triangle has an angle that measures 57° and an angle that measures 70°. Color this triangle GREEN.

This **RIGHT** triangle has an angle that measures 30° and an angle that measures 60°. Color this triangle RED.

This **OBTUSE** triangle has an angle that measures 120°. Color this triangle BLUE.

This **ACUTE** triangle has three angles that measure 60°. Color this triangle YELLOW.

This **ACUTE** triangle has an angle that measures 80° and an angle that measures 30°. Color this triangle ORANGE.

This **RIGHT** triangle has an angle that measures 53° and an angle that measures 37°. Color this triangle PURPLE.

1. Divide ÷
2. Multiply x
3. Subtract -
4. Bring Down ↓

(Repeat)

Review

1. Complete the problems.

$$8\overline{)488} = 61 \qquad 9\overline{)549} = 61$$

346 × 2 = 692	951 × 7 = 6,657	582 × 3 = 1,746

2. Devin made a mistake when completing the division problem below. Can you find his mistake? Once you do, complete the problem correctly.

He should have written "minus 6" under the 6, not under the 8.

$$\begin{array}{r} 14 \\ 6\overline{)684} \\ -\ 6 \\ \hline 24 \\ -\ 24 \\ \hline 0 \end{array} \qquad \begin{array}{r} 114 \\ 6\overline{)684} \\ -\ 6\downarrow \\ \hline 08 \\ -\ 6\downarrow \\ \hline 24 \\ -\ 24 \\ \hline 0 \end{array}$$

3. Fill in the missing numerators and denominators to make fractions equal to $\frac{1}{2}$.

9/18	3/6	13/26	15/30	6/12	2/4	4/8	1/2	8/16	20/40	12/24

4. Fill in the missing information to make equivalent fractions.

$\frac{3}{4} \overset{\times 2}{=} \frac{6}{8}$ $\qquad \frac{3}{4} \overset{\times 4}{=} \frac{12}{16}$ $\qquad \frac{3}{4} \overset{\times 5}{=} \frac{15}{20}$ $\qquad \frac{3}{4} \overset{\times 3}{=} \frac{9}{12}$

Targeted Multiplication Fact Practice

Practice any problems you missed in your Set D quiz in Lesson 49. Then complete the problems in this section.

12 × 3 = 36	12 × 12 = 144	12 × 8 = 96	12 × 5 = 60	12 × 11 = 132	12 × 7 = 84	12 × 4 = 48	12 × 9 = 108	12 × 6 = 72
9 × 12 = 108	3 × 12 = 36	11 × 12 = 132	8 × 12 = 96	5 × 12 = 60	6 × 12 = 72	4 × 12 = 48	7 × 12 = 84	2 × 12 = 24

Review

16 oz = 1 lb
2,000 lb = 1 tn
1,000 g = 1 kg

1. Complete each conversion.

8 lb = 128 oz	32 oz = 2 lb	6,000 lb = 3 tn
12 lb = 192 oz	6.35 kg = 6,350 g	4,000 g = 4 kg

2. Simplify each fraction or mixed number, and then write each one as a decimal number.

$\frac{15}{20}$	$\frac{3}{4}$	0.75	$\frac{2}{8}$	$\frac{1}{4}$	0.25	$1\frac{10}{20}$	$1\frac{1}{2}$	1.5	$3\frac{4}{16}$	$3\frac{1}{4}$	3.25

3. Add or subtract the mixed numbers and fraction. Then write the answers in simplest form in the gray boxes.

$5\frac{5}{12} - 1\frac{4}{24} = 4\frac{6}{24}$ → $4\frac{1}{4}$

$6\frac{1}{4} + \frac{2}{8} = 6\frac{4}{8}$ → $6\frac{1}{2}$

$2\frac{1}{6} + 1\frac{1}{2} = 3\frac{4}{6}$ → $3\frac{2}{3}$

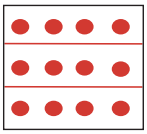
4. Complete each problem.

$30\overline{)6,442}$ = 214 R22 $\quad 10\overline{)258}$ = 25 R8

$4\overline{)815}$ = 203 R3 $\quad 10\overline{)3,250}$ = 325

5. Use the box to divide the number 12 into 3 equal groups. Then answer the question.

What is $\frac{2}{3}$ of 12? 8



6. Rewrite each problem vertically on scratch paper and complete it.

195.54 - 84.193 = 111.347
0.341 + 730.88 = 731.221
8.34 + 274.307 = 282.647

$8\overline{)64}$ = 8	$5\overline{)25}$ = 5	$4\overline{)16}$ = 4	$5\overline{)45}$ = 9	$4\overline{)36}$ = 9	$3\overline{)27}$ = 9	$5\overline{)35}$ = 7	$6\overline{)18}$ = 3	$6\overline{)30}$ = 5	$8\overline{)72}$ = 9	$12\overline{)108}$ = 9	$12\overline{)36}$ = 3

TREASURE HUNT

Are you ready to go on a treasure hunt? Use the ordered pairs listed to find the path to the treasure chest. As you find each point, write the letter for that ordered pair in the box at the bottom of the next page. Connect the points in order as you travel across the map.

Path to the Treasure

(5, 1)
(6, 3)
(4, 3)
(3, 4)
(2, 6)
(5, 7)
(7, 7)
(7, 5)
(8, 3)
(9, 2)

Lesson 117

REVIEW GAME: UNITS 1 AND 2

- Complete today's *Math 4 Mental Math Map Mysteries* activity.
- There are no more videos, mini lessons, or practice!

Welcome to Italy! In the next two lessons, we will be taking a trip across the country of Italy, visiting different cities while reviewing some of the most important skills you've learned throughout this course. Follow the itinerary below to move from city to city. Complete each of the problems on the postcard for that city before moving on to the next city.

DAY 1
Your plane lands in Italy at 4:45 PM. The plane ride lasted 2 hours and 20 minutes. At what time did you board the plane?

2:25 PM

Your tour of Italy starts in Bolzano, the capital of the South Tyrol region. This beautiful area offers stunning castles and quaint mountain villages amid endless hills and vineyards.

DAY 2
You hop on a bus for the short trip to the famous city of Venice. The bus leaves at 7:23 AM and arrives at 10:50 AM. How long was the bus ride?

3 hours 27 minutes

The city of Venice stretches across 118 small islands and doesn't have any major roads, just canals! Today, you take a gondola ride through the historic city.

LESSONS 119-120

COURSE ASSESSMENT

Parent/Teacher

Read the following information aloud to the child: This assessment is different from the others you have taken in this course. Instead of covering only concepts taught in Unit 4, this assessment covers concepts you have learned throughout the entire course. Problems in this assessment have been carefully designed to assess you on multiple skills at once. For example, a single long division question can cover the long division steps, division with zero in the quotient, dividing by two-digit numbers, and dividing decimals. A question on rounding can assess place value, rounding, and decimal numbers. This assessment does not cover every skill you learned in Math 4. Instead, it focuses on skills you need to know as you start Math 5.

Here are some tips. First, make sure to read the instructions carefully. Second, do not rush through exercises you think you already know. Third, if you start to get frustrated with one section, try skipping to a different section and then coming back later. The sections do not need to be completed in order.

For Lesson 119 complete all the exercises with PURPLE headers ONLY. Your parent or teacher will correct the work. If you make one or more mistakes in a section, your parent or teacher will check the orange "Additional Practice" checkbox for that section.

For Lesson 120 complete all the orange sections **that are checked**. If you still have trouble with the concept, go back and rewatch the video or reread the mini lesson for that topic.

Student

DECIMAL NUMBERS
(LESSONS 76, 87 & 103)

Rewrite each problem vertically and complete it.

241.62 + 92.107 = 333.727

175.845 - 47.5 = 128.345

Divide or multiply each number by moving the decimal point.

22.47 ÷ 10 = 2.247
195.3 ÷ 100 = 1.953
12,347 ÷ 1,000 = 12.347
4.32 × 10 = 43.2
7.489 × 100 = 748.9
1.234 × 1,000 = 1,234

In the number below, circle the digit in the thousandths place. Draw a square around the digit in the tenths place. Cross out the digit in the hundredths place.

2,487.950

Additional Practice

Complete each problem.

$\begin{array}{r} 12.75 \\ +\ 0.47 \\ \hline 13.22 \end{array}$ $\begin{array}{r} 157.12 \\ -\ 41.24 \\ \hline 115.88 \end{array}$

Divide or multiply each decimal number by moving the decimal point.

21.8 ÷ 10 = 2.18
634.2 ÷ 100 = 6.342
321.7 ÷ 1,000 = 0.3217

Circle the digit in the hundredths place.

14,517.398

0.78 × 10 = 7.8
27.87 × 100 = 2,787
2.0478 × 1,000 = 2,047.8

LONG DIVISION
(LESSONS 41, 47, 51, 63, 69, 77, 81, 97, 101, 111 & 113)

Complete each division problem. Remember to write the decimal point in the quotient if necessary.

35.7 ⟌ 6)214.2

20.4 ⟌ 18)367.2

684 R2 ⟌ 10)6,842

223 R12 ⟌ 32)7,148

Additional Practice

Complete each division problem. Remember to write the decimal point in the quotient if necessary.

3.81 ⟌ 4)15.24

22.48 ⟌ 21)472.08

361 R9 ⟌ 10)3,619

111 R17 ⟌ 45)5,012

EXPONENTS & PRIME NUMBERS
(LESSONS 37 & 52)

Convert from factored form to exponent form.

2 × 2 × 2 = 2^3
5 × 5 × 5 × 5 × 5 = 5^5
8 × 8 × 8 × 8 × 8 × 8 = 8^6
3 × 3 × 3 × 3 = 3^4

Circle all the prime numbers in the box below.

(2)	(3)	4	(5)	6	(7)	8	9	10
(11)	12	(13)	14	15	16	(17)	18	

Fill in the perfect squares in the chart. The first one has been done.

4^2	16
8^2	64
2^2	4
5^2	25
3^2	9
9^2	81

Additional Practice

Convert from exponent form to factored form.

4^6 = 4 × 4 × 4 × 4 × 4 × 4
7^3 = 7 × 7 × 7
9^5 = 9 × 9 × 9 × 9 × 9
6^2 = 6 × 6

Circle all the composite numbers in the box below.

2	3	(4)	5	(6)	7	(8)	(9)	(10)
11	(12)	13	(14)	(15)	(16)	17	(18)	

Fill in the perfect squares in the chart. The first one has been done.

11^2	121
4^2	16
10^2	100
7^2	49
6^2	36
12^2	144