

Wednesday, August 21, 2019

Name: \_\_\_\_\_ Section: \_\_\_\_\_

## 5<sup>th</sup> Grade American Math Homework

### Chapter 1

	To be completed on:	✓
Lesson 1.0	Wednesday 8/21	
Lesson 1.1	Thursday 8/22	
Lesson 1.2	Friday 8/23	
Lesson 1.3	Monday 8/26	
Lesson 1.4	Tuesday 8/27	
Lesson 1.5	Wednesday 8/28	
Quiz	Thursday 8/29	
Lessons 1.6/1.7	Friday 8/30	

$$\begin{array}{l} 2 > -3 \\ 0.999... = 1 \\ \pi \approx 3.14 \\ \sqrt{2} \\ 1 + 2 \cdot 3 \\ 5(2 + 2) \\ 101_2 = 5_{10} \end{array}$$

Alexandra Georgiou

[alexandra.georgiou@archimedean.org](mailto:alexandra.georgiou@archimedean.org)

## How to Read and Write Large Numbers

- Numbers are grouped in sets of three called a **period**.

Trillions Period			Billions Period			Millions Period			Thousands Period			Ones Period		
Hundreds	Tens	Ones	Hundreds	Tens	Ones	Hundreds	Tens	Ones	Hundreds	Tens	Ones	Hundreds	Tens	Ones
		2	6	2	3	6	8	4	6	0	8	0	0	0

- Each period has three places: the ones, tens and hundreds.

## Lesson 1.0

### Separate the periods and write the word form of the number

Example: 10,956,501

Ten million, nine hundred fifty-six thousand, five hundred and one

1. 1 0 9 5 1 1 0 0 3

---

2. 2 0 1 0 9 5 1 0 3 2

---

3. 8 9 9 6 7 8 3 1 5 4

---

4. 2 2 9 1 7 5 0 9 7 3 5

---

5. 9 1 3 3 0 0 0 0 5 0 1

---

6. 6 0 9 0 7 1 0 0 8 2 0 9

---

Name \_\_\_\_\_

## Place Value and Patterns

Complete the sentence.

1. 40,000 is 10 times as much as **4,000** | 2. 90 is  $\frac{1}{10}$  of \_\_\_\_\_.

3. 800 is 10 times as much as \_\_\_\_\_ | 4. 5,000 is  $\frac{1}{10}$  of \_\_\_\_\_.

Use place-value patterns to complete the table.

Number	10 times as much as	$\frac{1}{10}$ of
5. 100		
6. 7,000		
7. 300		
8. 80		

Number	10 times as much as	$\frac{1}{10}$ of
9. 2,000		
10. 900		
11. 60,000		
12. 500		

## Problem Solving



13. The Eatery Restaurant has 200 tables. On a recent evening, there were reservations for  $\frac{1}{10}$  of the tables. How many tables were reserved?
14. Mr. Wilson has \$3,000 in his bank account. Ms. Nelson has 10 times as much money in her bank account as Mr. Wilson has in his bank account. How much money does Ms. Nelson have in her bank account?

## Lesson Check

1. What is 10 times as much as 700?  
(A) 7  
(B) 70  
(C) 7,000  
(D) 70,000
2. What is  $\frac{1}{10}$  of 3,000?  
(A) 30,000  
(B) 300  
(C) 30  
(D) 3

## Spiral Review

3. Risa is sewing a ribbon around the sides of a square blanket. Each side of the blanket is 72 inches long. How many inches of ribbon will Risa need? (Grade 4)  
(A) 144 inches  
(B) 208 inches  
(C) 288 inches  
(D) 5,184 inches
4. What is the value of  $n$ ? (Grade 4)  
 $9 \times 27 + 2 \times 31 - 28 = n$   
(A) 249  
(B) 277  
(C) 783  
(D) 7,567
5. Between what pair of numbers is the product of 289 and 7? (Grade 4)  
(A) between 200 and 300  
(B) between 1,400 and 1,500  
(C) between 1,400 and 1,800  
(D) between 1,400 and 2,100
6. Which list shows the numbers in order from **greatest to least**? (Grade 4)  
(A) 7,613; 7,361; 7,136  
(B) 7,631; 7,136; 7,613  
(C) 7,136; 7,361; 7,613  
(D) 7,136; 7,613; 7,361

Name \_\_\_\_\_

## Place Value of Whole Numbers

Write the value of the underlined digit.

1. 5,165,874

60,000

2. 281,480,100

3. 7,270

4. 89,170,326

5. 7,050,423

6. 646,950

7. 37,123,745

8. 315,421,732

Write the number in two other forms.

9. 15,409

10. 100,203

11. 6,007,200

12. 32,005,008

## Problem Solving



13. The U.S. Census Bureau has a population clock on the Internet. On a recent day, the United States population was listed as 310,763,136. Write this number in word form.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

14. In 2008, the population of 10- to 14-year-olds in the United States was 20,484,163. Write this number in expanded form.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## Lesson Check

1. A movie cost \$3,254,107 to produce. Which digit is in the hundred thousands place?  
(A) 5  
(B) 4  
(C) 2  
(D) 1
2. Which is another way to write two hundred ten million, sixty-four thousand, fifty?  
(A) 210,640,050  
(B) 210,064,050  
(C) 201,064,500  
(D) 200,106,450

## Spiral Review

3. If the pattern below continues, what number likely comes next? (Grade 4)  
9, 12, 15, 18, 21,   ?  
(A) 36  
(B) 24  
(C) 22  
(D) 20
4. What is  $52 \div 8$ ? (Grade 4)  
(A) 8 r4  
(B) 7 r4  
(C) 6 r4  
(D) 5 r4
5. How many pairs of parallel sides does the trapezoid below have? (Grade 4)
6. Which figure appears to have only 1 line of symmetry? (Grade 4)



Name \_\_\_\_\_

# Properties

Use properties to find the sum or product.

1.  $6 \times 89$

$6 \times (90 - 1)$

$(6 \times 90) - (6 \times 1)$

$540 - 6$

$534$

2.  $93 + (68 + 7)$

3.  $5 \times 23 \times 2$

4.  $8 \times 51$

5.  $34 + 0 + 18 + 26$

6.  $6 \times 107$

Complete the equation, and tell which property you used.

7.  $(3 \times 10) \times 8 = \underline{\hspace{2cm}} \times (10 \times 8)$

8.  $16 + 31 = 31 + \underline{\hspace{2cm}}$

9.  $0 + \underline{\hspace{2cm}} = 91$

10.  $21 \times \underline{\hspace{2cm}} = 9 \times 21$

## Problem Solving



11. The Metro Theater has 20 rows of seats with 18 seats in each row. Tickets cost \$5. The theater's income in dollars if all seats are sold is  $(20 \times 18) \times 5$ . Use properties to find the total income.

12. The numbers of students in the four sixth-grade classes at Northside School are 26, 19, 34, and 21. Use properties to find the total number of students in the four classes.



## Lesson Check

1. To find  $19 + (11 + 37)$ , Lennie added 19 and 11. Then he added 37 to the sum. Which property did he use?  
(A) Distributive Property  
(B) Commutative Property of Addition  
(C) Associative Property of Addition  
(D) Identity Property of Addition
2. Marla did 65 sit-ups each day for one week. Which expression can you use to find the total number of sit-ups Marla did during the week?  
(A)  $(7 \times 6) + (7 \times 5)$   
(B)  $(5 \times 60) + (5 \times 7)$   
(C)  $(7 + 60) \times (7 + 5)$   
(D)  $(7 \times 60) + (7 \times 5)$

## Spiral Review

3. The average sunflower has 34 petals. Which is the best estimate of the total number of petals on 57 sunflowers? (Grade 4)  
(A) 18  
(B) 180  
(C) 1,800  
(D) 18,000
4. A golden eagle flies a distance of 290 miles in 5 days. If the eagle flies the same distance each day of its journey, how far does the eagle fly per day? (Grade 4)  
(A) 50 miles  
(B) 58 miles  
(C) 290 miles  
(D) 295 miles
5. What is the value of the underlined digit in the following number? (Lesson 1.2)  
 $2,9\textbf{8}3,785$   
(A) 80  
(B) 800  
(C) 8,000  
(D) 80,000
6. The number 5 is (Grade 4)  
(A) prime.  
(B) composite.  
(C) neither prime nor composite.  
(D) both prime and composite.

Name \_\_\_\_\_

# **Powers of 10 and Exponents**

Write in exponent form and word form.

1.  $10 \times 10 \times 10$

2.  $10 \times 10$

3.  $10 \times 10 \times 10 \times 10$

exponent form:  $10^3$

exponent form: \_\_\_\_\_

exponent form: \_\_\_\_\_

word form: **the  
third power  
of ten**

word form: \_\_\_\_\_

word form: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

Find the value.

4.  $10^3$

5.  $4 \times 10^2$

6.  $9 \times 10^4$

7.  $10^1$

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

8.  $10^5$

9.  $5 \times 10^1$

10.  $7 \times 10^3$

11.  $8 \times 10^0$

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## **Problem Solving**



12. The moon is about 240,000 miles from Earth. What is this distance written as a whole number multiplied by a power of ten?

\_\_\_\_\_

13. The sun is about  $93 \times 10^6$  miles from Earth. What is this distance written as a whole number?

\_\_\_\_\_

## Lesson Check

- Which of the following is NOT equivalent to "3 times the sixth power of 10?"  
(A)  $3 \times 10^6$   
(B) 3,000,000  
(C)  $3 \times 10 \times 6$   
(D)  $3 \times 1,000,000$
- Gary mails  $10^3$  flyers to clients in one week. How many flyers does Gary mail?  
(A) 10  
(B) 100  
(C) 1,000  
(D) 10,000

## Spiral Review

- Harley is loading 625 bags of cement onto small pallets. Each pallet holds 5 bags. How many pallets will Harley need? (Grade 4)  
(A) 125  
(B) 620  
(C) 630  
(D) 3,125
- Marylou buys a package of 500 jewels to decorate 4 different pairs of jeans. She uses the same number of jewels on each pair of jeans. How many jewels will she use for each pair of jeans? (Grade 4)  
(A) 100  
(B) 125  
(C) 200  
(D) 2,000
- Manny buys 4 boxes of straws for his restaurant. There are 500 straws in each box. How many straws does he buy? (Grade 4)  
(A) 20,000  
(B) 2,000  
(C) 200  
(D) 125
- Cammie goes to the gym to exercise 4 times per week. Altogether, how many times does she go to the gym in 10 weeks? (Grade 4)  
(A) 4  
(B) 10  
(C) 20  
(D) 40

Name \_\_\_\_\_

# Multiplication Patterns

Use mental math to complete the pattern.

1.  $8 \times 3 = 24$

$$\begin{aligned}(8 \times 3) \times 10^1 &= \underline{240} \\ (8 \times 3) \times 10^2 &= \underline{2,400} \\ (8 \times 3) \times 10^3 &= \underline{24,000}\end{aligned}$$

2.  $5 \times 6 =$  \_\_\_\_\_

$(5 \times 6) \times 10^1 =$  \_\_\_\_\_

$(5 \times 6) \times 10^2 =$  \_\_\_\_\_

$(5 \times 6) \times 10^3 =$  \_\_\_\_\_

3.  $3 \times$  \_\_\_\_\_  $= 27$

$(3 \times 9) \times 10^1 =$  \_\_\_\_\_

$(3 \times 9) \times 10^2 =$  \_\_\_\_\_

$(3 \times 9) \times 10^3 =$  \_\_\_\_\_

4. \_\_\_\_\_  $\times 4 = 28$

$(7 \times 4) \times$  \_\_\_\_\_  $= 280$

$(7 \times 4) \times$  \_\_\_\_\_  $= 2,800$

$(7 \times 4) \times$  \_\_\_\_\_  $= 28,000$

5.  $6 \times 8 =$  \_\_\_\_\_

$(6 \times 8) \times 10^2 =$  \_\_\_\_\_

$(6 \times 8) \times 10^3 =$  \_\_\_\_\_

$(6 \times 8) \times 10^4 =$  \_\_\_\_\_

6. \_\_\_\_\_  $\times 4 = 16$

$(4 \times 4) \times 10^2 =$  \_\_\_\_\_

$(4 \times 4) \times 10^3 =$  \_\_\_\_\_

$(4 \times 4) \times 10^4 =$  \_\_\_\_\_

Use mental math and a pattern to find the product.

7.  $(2 \times 9) \times 10^2 =$  \_\_\_\_\_

8.  $(8 \times 7) \times 10^2 =$  \_\_\_\_\_

9.  $(9 \times 6) \times 10^3 =$  \_\_\_\_\_

10.  $(3 \times 7) \times 10^3 =$  \_\_\_\_\_

11.  $(5 \times 9) \times 10^4 =$  \_\_\_\_\_

12.  $(4 \times 8) \times 10^4 =$  \_\_\_\_\_

13.  $(8 \times 8) \times 10^3 =$  \_\_\_\_\_

14.  $(6 \times 4) \times 10^4 =$  \_\_\_\_\_

15.  $(5 \times 5) \times 10^3 =$  \_\_\_\_\_

## Problem Solving



16. The Florida Everglades welcomes about  $2 \times 10^3$  visitors per day. Based on this, about how many visitors come to the Everglades per week?

---

---

17. The average person loses about  $8 \times 10^1$  strands of hair each day. About how many strands of hair would the average person lose in 9 days?

---

---

## Lesson Check

1. How many zeros are in the product  $(6 \times 5) \times 10^3$ ?  
(A) 3  
(B) 4  
(C) 5  
(D) 6
2. Addison studies a tarantula that is 30 millimeters long. Suppose she uses a microscope to magnify the spider by  $4 \times 10^2$ . How long will the spider appear to be?  
(A) 12 millimeters  
(B) 120 millimeters  
(C) 1,200 millimeters  
(D) 12,000 millimeters

## Spiral Review

3. Hayden has 6 rolls of dimes. There are 50 dimes in each roll. How many dimes does he have altogether? (Grade 4)  
(A) 300  
(B) 110  
(C) 56  
(D) 30
4. An adult ticket to the zoo costs \$20, and a child's ticket costs \$10. How much will it cost for Mr. and Mrs. Brown and their 4 children to get into the zoo? (Grade 4)  
(A) \$40  
(B) \$60  
(C) \$80  
(D) \$100
5. At a museum, 100 posters are displayed in each of 4 rooms. Altogether, how many posters are displayed? (Grade 4)  
(A) 40  
(B) 100  
(C) 104  
(D) 400
6. A store sells a gallon of milk for \$3. A baker buys 30 gallons of milk for his bakery. How much will he have to pay? (Grade 4)  
(A) \$120  
(B) \$90  
(C) \$60  
(D) \$30

Name \_\_\_\_\_

## Multiply by 1-Digit Numbers

Estimate. Then find the product.

1. Estimate: 3,600

$$\begin{array}{r} 15 \\ 416 \\ \times 9 \\ \hline 3,744 \end{array}$$

2. Estimate: \_\_\_\_\_

$$\begin{array}{r} 1,374 \\ \times 6 \\ \hline \end{array}$$

3. Estimate: \_\_\_\_\_

$$\begin{array}{r} 726 \\ \times 5 \\ \hline \end{array}$$

4. Estimate: \_\_\_\_\_

$$\begin{array}{r} 872 \\ \times 3 \\ \hline \end{array}$$

5. Estimate: \_\_\_\_\_

$$\begin{array}{r} 2,308 \\ \times 9 \\ \hline \end{array}$$

6. Estimate: \_\_\_\_\_

$$\begin{array}{r} 1,564 \\ \times 5 \\ \hline \end{array}$$

Estimate. Then find the product.

7.  $4 \times 979$

8.  $503 \times 7$

9.  $5 \times 4,257$

10.  $6,018 \times 9$

11.  $758 \times 6$

12.  $3 \times 697$

13.  $2,141 \times 8$

14.  $7 \times 7,956$

## Problem Solving



15. Mr. and Mrs. Dorsey and their three children are flying to Springfield. The cost of each ticket is \$179. Estimate how much the tickets will cost. Then find the exact cost of the tickets.

---

---

---

16. Ms. Tao flies roundtrip twice yearly between Jacksonville and Los Angeles on business. The distance between the two cities is 2,150 miles. Estimate the distance she flies for both trips. Then find the exact distance.

---

---

---

Name \_\_\_\_\_

## Multiply by 2-Digit Numbers

Estimate. Then find the product.

1. Estimate: **4,000** \_\_\_\_\_

$$\begin{array}{r} 82 \\ \times 49 \\ \hline 738 \\ + 3280 \\ \hline 4,018 \end{array}$$

2. Estimate: \_\_\_\_\_

$$\begin{array}{r} 92 \\ \times 68 \\ \hline \end{array}$$

3. Estimate: \_\_\_\_\_

$$\begin{array}{r} 396 \\ \times 37 \\ \hline \end{array}$$

4.  $23 \times 67$

5.  $86 \times 33$

6.  $78 \times 71$

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

7.  $309 \times 29$

8.  $612 \times 87$

9.  $476 \times 72$

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## Problem Solving



10. A company shipped 48 boxes of canned dog food. Each box contains 24 cans. How many cans of dog food did the company ship in all?

\_\_\_\_\_

11. There were 135 cars in a rally. Each driver paid a \$25 fee to participate in the rally. How much money did the drivers pay in all?

\_\_\_\_\_