

**AMERICAN MATH HW  
WEEK OF 15SEP TO 19SEP**

**Due Date: Sunday, 09/21 by midnight**

**Focus for the week:** The focus of the HW this week is to be able to multiply up to 3-digit number by up to 2-digit number (solve: using Standard algorithm; check: using Area model) in context of multi-step word problems.

**Pacing guideline:** Look at the top right corner of the page for the suggested pace.

**Uploading Instructions:** Homework will be accepted only through Archie. Upload homework on Archie and wait till you get the message – “**the file has been successfully uploaded**”. If for any reason you have technical issues, get in touch with me as soon as possible.

Paper homework is accepted for valid reasons. In such cases, parents should reach out via email to inform about the same.

**IMPORTANT** – Please show ALL YOUR WORK done to find the answer to any problem to earn FULL CREDIT. No credit is earned when only final answer is written and no work is shown.

**Note:** Bring your homework to class everyday. I will discuss the HW from the previous day in every class. It is important to practice the assigned topics daily because the next day's instruction builds on the previous lesson.

**ANNOUNCEMENT – Quiz on Mon, 09/22 on content covered in this HW. Review HW and use below IXL modules to practice further.**

**Additional Practice Material (Optional):**

1) IXL practice:

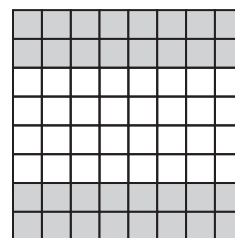
- i. Go to IXL.com on any web browser OR IXL app on iPad
- ii. Login using following credentials:
  - Username – your\_archie\_username@archimedeanacad
  - Password – archie199
- iii. Go to Learning> Skills> Fourth Grade Math
- iv. Practice modules –
  - a. Fourth Grade : H17, H18, I10, I11, I12, (I7-used only to check answer)
  - b. Fifth Grade: D11, D13

Name \_\_\_\_\_

## Multi-Step Multiplication Problems

Solve each problem.

1. A community park has 6 tables with a chessboard painted on top. Each board has 8 rows of 8 squares. When a game is set up, 4 rows of 8 squares on each board are covered with chess pieces. If a game is set up on each table, how many total squares are NOT covered by chess pieces?



$$4 \times 8 = 32$$

$$6 \times 32 = \blacksquare$$

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192 squares

2. Jonah and his friends go apple picking. Jonah fills 5 baskets. Each basket holds 15 apples. If 4 of Jonah's friends pick the same amount as Jonah, how many apples do Jonah and his friends pick in all? Draw a diagram to solve the problem.

## Lesson Check

4. At a tree farm, there are 9 rows of 36 spruce trees. In each row, 14 of the spruce trees are blue spruce. How many spruce trees are NOT blue spruce?
- 
5. Kai is tiling a countertop. He needs to place 54 square tiles in each of 8 rows to cover the counter. He wants to randomly place 8 groups of 4 blue tiles each and have the rest of the tiles be white. How many white tiles will Kai need?
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## Spiral Review

6. Juan reads a book with 368 pages. Savannah reads a book with 172 fewer pages than Juan's book. How many pages are in the book Savannah reads?
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7. Hailey has bottles that hold 678 pennies each. About how many pennies does she have if she has 6 bottles filled with pennies?
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8. Terrence plants a garden that has 8 rows of flowers, with 28 flowers in each row. How many flowers did Terrence plant?
- 
9. Ivan has 5 fish in his fish tank. Jasmine has 4 times as many fish as Ivan has. How many fish does Jasmine have?
-

Name \_\_\_\_\_

# Solve Multi-Step Problems Using Equations

## Problem Solving

1. Rebecca bought a flat of 144 pansies. She planted 3 rows of 16 pansies each. She planted 4 rows of 14 pansies each. How many pansies does she have left to plant?

16	16	16	14	14	14	14	$p$
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144

$3 \times 16 = \underline{\quad}$

$4 \times 14 = \underline{\quad}$

$p = 144 - \underline{\quad} - \underline{\quad}$

$p = \underline{\quad}$

2. Kiara packed 18 DVDs in each of 4 boxes. She packed 15 DVDs in each of 5 boxes. She has 8 DVDs left over. How many DVDs does Kiara have?
3. Monty buys 2 adult dinner tickets for \$22 each, 2 senior tickets for \$18 each and 3 child tickets for \$12 each. How much change will he get from \$120?
4. Quaddus has 4 shelves with 22 dinosaur models on each shelf. He has 3 shelves with 20 dragon models on each shelf. How many more dinosaur models than dragon models does Quaddus have?
5. Alexis needs 280 screws to finish her deck. She bought 3 boxes of screws with 40 screws in a box. She had 168 screws. How many screws will she have left over when she finishes the deck?

## Lesson Check

Fill in the bubble completely to show your answer.

6. Erika baked 7 trays of 12 muffins each. Simon baked 5 trays of 18 muffins each. They agreed to make 200 muffins for the school bake sale. How many more muffins do they need to make?
- (A) 26  
(B) 36  
(C) 38  
(D) 52
7. Victoria is buying stickers. She bought 3 packages of stars with 24 in each package. She bought 2 packages of rainbows with 16 in each package. She bought 4 packages of hearts with 10 in each package. She used 82 of the stickers to make cards. How many stickers does Victoria have left?
- (A) 62  
(B) 72  
(C) 96  
(D) 114
8. Ghandi bagged his potatoes in 18 ten-pound bags, 16 five-pound bags, and 4 twenty-five pound bags. He has 2 pounds of potatoes left over. How many pounds of potatoes does Ghandi have?
- (A) 262 pounds  
(B) 352 pounds  
(C) 358 pounds  
(D) 362 pounds
9. Mateo bought 6 hats for \$14 each and 3 belts for \$33 each. How much change did he get from \$200?
- (A) \$7  
(B) \$17  
(C) \$27  
(D) \$58

## Spiral Review

10. Jarita bought 352 ounces of juice. She used 320 ounces of juice to make punch. How many ounces of juice does Jarita have left?
- (A) 22 ounces  
(B) 32 ounces  
(C) 42 ounces  
(D) 52 ounces
11. Jules counted 30 big balloons. There were 6 times as many small balloons as big balloons. How many small balloons were there?
- (A) 18  
(B) 108  
(C) 180  
(D) 1,800

Name \_\_\_\_\_

## Multiply with Regrouping

**Estimate. Then find the product.**

$$\begin{array}{r}
 1. \text{ Estimate: } \underline{2,700} \\
 \phantom{1. \text{ Estimate: }} \begin{array}{r} 2 \\ 1 \\ 87 \\ \times 32 \\ \hline 174 \\ + 2,610 \\ \hline 2,784 \end{array}
 \end{array}$$

Think: 87 is close to 90 and 32 is close to 30.

$$90 \times 30 = 2,700$$

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

$$\begin{array}{r}
 673 \\
 \times 28 \\
 \hline
 \end{array}$$

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

$$\begin{array}{r}
 48 \\
 \times 38 \\
 \hline
 \end{array}$$

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

$$\begin{array}{r}
 359 \\
 \times 52 \\
 \hline
 \end{array}$$

## Problem Solving

- Baseballs come in cartons of 84 baseballs. A team orders 18 cartons of baseballs. How many baseballs does the team order?
- There are 16 tables in the school lunch room. Each table can seat 22 students. How many students can be seated at lunch at one time?

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## Lesson Check

8. The art teacher has 48 boxes of crayons. There are 64 crayons in each box. How many crayons does the teacher have?
9. A basketball team scored an average of 52 points in each of 15 games. Based on the average, how many points did the team score in all?

## Spiral Review

10. One Saturday, an orchard sold 83 bags of apples. There are 27 apples in each bag. About how many apples were sold?
11. Deja has a grid of squares that has 12 rows with 15 squares in each row. She colors 5 rows of 8 squares in the middle of the grid blue. She colors the rest of the squares red. How many squares does Deja color red?
12. Gabriella has 4 times as many erasers as Leona. Leona has 8 erasers. How many erasers does Gabriella have?
13. Jun has 3 times as many rocks as Heechul. Together, they have 48 rocks. How many more rocks does Jun have than Heechul?

Name \_\_\_\_\_

## Multiply by 2-Digit Numbers

Solve each problem. Use a bar model to help.

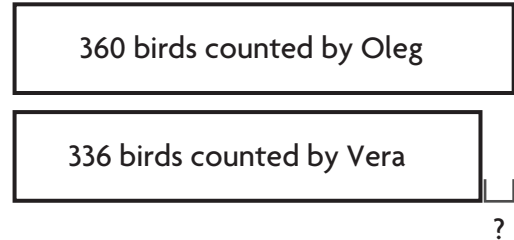
1. Oleg counted an average of 18 birds at his bird feeder each day for 20 days. Vera counted an average of 21 birds at her bird feeder each day for 16 days. How many more birds did Oleg count at his feeder than Vera counted at hers?

Birds counted by Oleg:  $18 \times 20 = 360$

Birds counted by Vera:  $21 \times 16 = 336$

Draw a bar model to compare.

Subtract.  $360 - 336 = 24$



So, Oleg counted 24 more birds.

2. The 24 students in Ms. Lee's class each collected an average of 118 cans for recycling. The 21 students in Mr. Galvez's class each collected an average of 125 cans for recycling. How many more cans were collected by Ms. Lee's class than Mr. Galvez's class?
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3. At East School, each of the 45 classrooms has an average of 22 students. At West School, each of the 42 classrooms has an average of 23 students. How many more students are at East School than at West School?
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## Lesson Check

5. Ace Manufacturing ordered 17 boxes with 105 ball bearings each. They also ordered 15 boxes with 90 springs each. How many more ball bearings than springs did they order?
6. Elton hiked 16 miles each day on a 12-day hiking trip. Lola hiked 14 miles each day on her 16-day hiking trip. In all, how many more miles did Lola hike than Elton hiked?

## Spiral Review

7. An orchard has 24 rows of apple trees. There are 35 apple trees in each row. How many apple trees are in the orchard?
8. An amusement park reported 354,605 visitors last summer. What is this number rounded to the nearest thousand?
9. Attendance at the football game was 102,653. What is the value of the digit 6?
10. Jill's fish weighs 8 times as much as her parakeet. Together, the pets weigh 63 ounces. How much does the fish weigh?