THIRD GRADE

Chapter 11: Multiplication with Multiples of 10 and 100

Dear Family,

During the next few weeks, our math class will be learning more about multiplication. We will learn strategies for multiplying with multiples of 10 and 100 and multiplying a 2-digit number with a 1-digit number.

You can expect to see homework that provides practice with strategies for multiplying with multiples of 10 and 100 and 2-digit numbers with 1-digit numbers.

Vocabulary

Factor: A number that is multiplied by another number to find a product.

Multiple: A number that is the product of two counting numbers.

Partial product: the product found by multiplying the tens and the ones separately.

Product: The answer to a multiplication problem.

- **Homework due date:** Sunday, Dec. 15th
- **Upload Homework on** Archie
- **Feel free to contact me with any questions at** diana.charaf@archimedean.org

Complete homework daily based on the schedule provided below:

Monday 12/09	**Pages: 507 - 508**
Tuesday 12/10	**Pages: 513 - 514**
Wednesday 12/11	**Pages: 519 - 520**
Thursday 12/12	**Pages: 525 - 526**
Friday 12/13	**Pages: 531 - 532**

Name _____

Use the Distributive Property

Go Online
Interactive Examples

Read each problem and solve.

1. Each time a student turns in a perfect spelling test, Ms. Ricks puts an achievement square on the bulletin board. There are 6 rows of squares on the bulletin board. Each row has 30 squares. How many perfect spelling tests have been turned in?

   Think: $6 \times 30 = (6 \times 10) + (6 \times 10) + (6 \times 10)$

   $= 60 + 60 + 60 = 180$

   180 spelling tests

2. Norma practices violin for 50 minutes every day. How many minutes does Norma practice violin in 7 days?

   _____

3. A kitchen designer is creating a new backsplash for the wall behind a kitchen sink. The backsplash will have 5 rows of tiles. Each row will have 20 tiles. How many tiles are needed for the entire backsplash?

   _____

4. A bowling alley keeps shoes in rows of cubbyholes. There are 9 rows of cubbyholes, with 20 cubbyholes in each row. If there is a pair of shoes in every cubbyhole, how many pairs of shoes are there?

   _____

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Lesson Check

6. Each snack pack holds 20 crackers. How many crackers in all are there in 4 snack packs?

7. A machine makes 70 springs each hour. How many springs will the machine make in 8 hours?

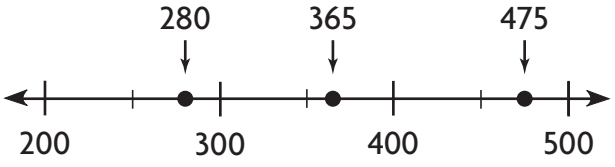
Spiral Review

8. Lila read 142 pages on Friday and 168 pages on Saturday. Estimate how many pages Lila read on Friday and Saturday combined.

9. Gema wrote $6 + 6 + 6 + 6$ on the board. What is another way to show $6 + 6 + 6 + 6$?

Use the number line for Problems 10 and 11.

10. A campground had 365 campers in March, 280 campers in April, and 475 campers in May. In which month were the least number of campers there? Use the number line to solve the problem.



11. Compare the number of campers in May to the number of campers in March.

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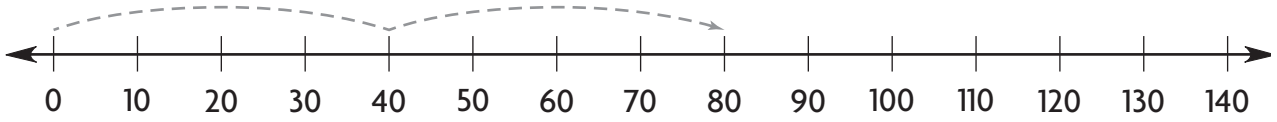
Use Place-Value Strategies to Multiply with Multiples of 10

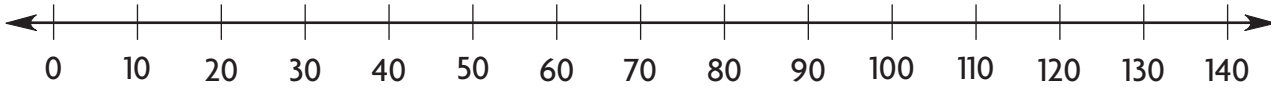
Go Online
Interactive Examples

Use a number line to find each product.

1. $2 \times 40 =$ 80



2. $4 \times 30 =$ _____



Use place value to find each product.

3. $5 \times 70 = 5 \times$ _____ tens

$=$ _____ tens $=$ _____

4. $60 \times 4 =$ _____ tens $\times 4$

$=$ _____ tens $=$ _____

Problem Solving Real World

5. One exhibit at the aquarium has 5 fish tanks. Each fish tank holds 50 gallons of water. How much water do the 5 tanks hold?

_____

6. In another aquarium display, there are 40 fish in each of 7 large tanks. How many fish are in the display?

_____

7. WRITE Math Which strategy do you prefer to use to multiply with multiples of 10: *base-ten blocks*, a *number-line*, or *place-value*? Explain why.

_____

_____

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Lesson Check

8. Each bag of pattern blocks contains 50 blocks. To make a class pattern, the teacher combines 4 bags of blocks. How many pattern blocks are there?

_____

9. A deli received 8 blocks of cheese. Each block of cheese weighs 60 ounces. What is the total weight of the blocks of cheese?

_____

Spiral Review

10. Alan and Beatriz collected cans for recycling. Alan collected 154 cans. Beatriz collected 215 cans. How many cans did they collect?

_____

_____

11. The third graders collected 754 cans. The fourth graders collected 592 cans. Estimate how many more cans the third graders collected.

_____

_____

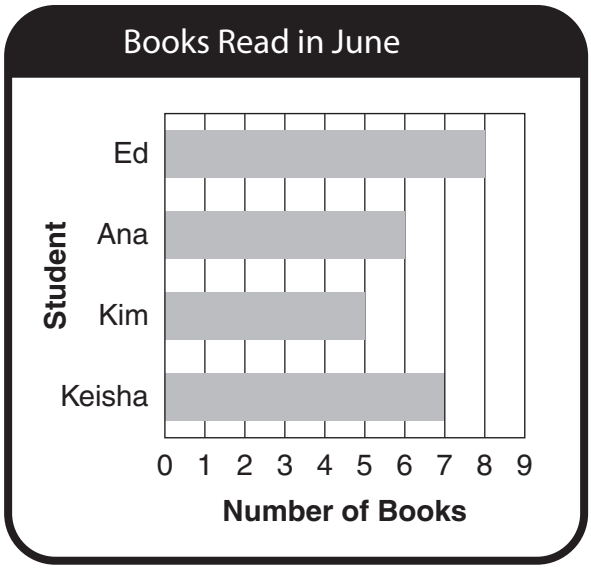
Use the bar graph for Problems 12 and 13.

12. How many more books did Ed read than Kim?

_____

13. How many books did the four students read in June?

_____



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Multiply Multiples of 10 by 1-Digit Numbers

Go Online
Interactive Examples

Find the product.

1. $4 \times 50 =$ 200
2. $60 \times 3 =$ _____
3. _____ $= 60 \times 5$

Find the product.

4. $\begin{array}{r} 80 \\ \times\ 3 \\ \hline \end{array}$
5. $\begin{array}{r} 50 \\ \times\ 2 \\ \hline \end{array}$
6. $\begin{array}{r} 60 \\ \times\ 7 \\ \hline \end{array}$
7. $\begin{array}{r} 70 \\ \times\ 4 \\ \hline \end{array}$

8. $6 \times 90 =$ ____
9. $9 \times 70 =$ ____
10. $8 \times 90 =$ ____
11. ____ $= 6 \times 80$

Problem Solving Real World

12. Each model car in a set costs $4. There are 10 different model cars in the set. How much would it cost to buy all the model cars in the set?

_____

13. Amanda exercises for 50 minutes each day. How many minutes will she exercise in 7 days?

_____

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Lesson Check

15. Each shelf in one section of the library holds 30 books. There are 9 shelves in that section. How many books will these shelves hold?

16. One can of juice mix makes 30 ounces of juice. How many ounces of juice can be made from 6 cans of juice mix?

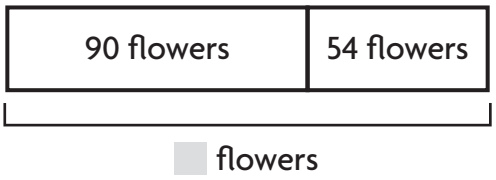
Spiral Review

17. Taemin bought 7 cans of tennis balls. There are 3 balls in each can. How many balls did Taemin buy?

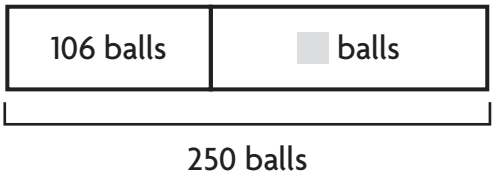
18. Use the Commutative Property of Multiplication to write a related multiplication equation.

$3 \times 4 = 12$

19. Lyn drew this bar model to solve a problem. What operation should she use to find the unknown number?



20. Rahul drew this bar model to find the unknown number of balls. Find the unknown number.



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Multiply Multiples of 100 by 1-Digit Numbers

Go Online
Interactive Examples

Use mental math to complete the pattern.

1. $6 \times 4 = 24$
$6 \times 40 =$ 240
$6 \times 400 =$ 2,400

2. $3 \times 7 = 21$
$3 \times 70 =$ _____
$3 \times 700 =$ _____

3. $6 \times 5 = 30$
$6 \times 50 =$ _____
$6 \times 500 =$ _____

4. $8 \times 9 = 72$
$8 \times 90 =$ _____
$8 \times 900 =$ _____

5. $8 \times 7 = 56$
$8 \times 70 =$ _____
$8 \times 700 =$ _____

6. $5 \times 7 = 35$
$5 \times 70 =$ _____
$5 \times 700 =$ _____

7. $9 \times 3 = 27$
$9 \times 30 =$ _____
$9 \times 300 =$ _____

8. $5 \times 5 = 25$
$5 \times 50 =$ _____
$5 \times 500 =$ _____

9. $4 \times 8 = 32$
$4 \times 80 =$ _____
$4 \times 800 =$ _____

Problem Solving Real World

10. Misha makes a lasagna for a dinner party. Each serving is 500 grams. If the lasagna contains 9 servings, how many grams are in the entire lasagna?

_____

11. Kiaya has worked for 5 weeks. She made $500 each of the first 2 weeks and $600 each of the last 3 weeks. How much money did Kiaya make after 5 weeks?

_____

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Lesson Check

12. Jerome has 9 books of stamps he has collected. Each book holds 400 stamps. How many stamps does Jerome have in all?

Ⓐ 3,600 stamps

Ⓑ 360 stamps

Ⓒ 3,200 stamps

Ⓓ 320 stamps

13. Leif pays $300 a month for rent. How much does he pay in 7 months?

Ⓐ $700

Ⓑ $2,100

Ⓒ $2,800

Ⓓ $4,900

Spiral Review

14. Which of the following represents the Commutative Property of Multiplication?

Ⓐ $5 \times 8 = 8 \times 5$

Ⓑ $0 = 4 \times 0$

Ⓒ $12 \times 1 = 12$

Ⓓ $(6 \times 4) \times 8 = 6 \times (4 \times 8)$

15. Kiera is decorating for a party. She wants balloons in 6 different locations. In each location, she will have 3 bunches of 4 balloons. How many balloons will Kiera need in all?

Ⓐ 12 balloons

Ⓑ 18 balloons

Ⓒ 24 balloons

Ⓓ 72 balloons

16. Deondre created drawings using chalk and pencils. He used chalk 3 times as often as he used pencil. If he used pencil 5 times, how many times did he used chalk?

Ⓐ 5

Ⓑ 15

Ⓒ 20

Ⓓ 25

17. Which property could be used to find the unknown factor?

$6 \times$  $= 0$

Ⓐ Zero Property of Multiplication

Ⓑ Identity Property of Multiplication

Ⓒ Commutative Property of Multiplication

Ⓓ Associative Property of Multiplication

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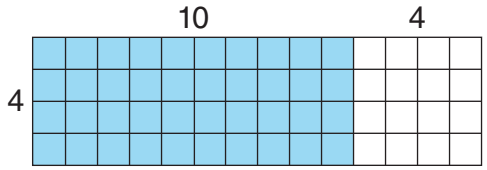
Use the Distributive Property to Multiply a 2-Digit Number and a 1-Digit Number

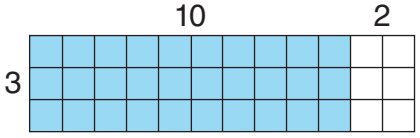
Find the product.

1. 

(4 × _____) + (4 × _____) =

_____ + _____

4 × 14 = _____

2. 

(3 × _____) + (3 × _____) =

_____ + _____

3 × 12 = _____

Find the product.

3. $\begin{array}{r} 23 \\ \times\ 6 \\ \hline \end{array}$

4. $\begin{array}{r} 18 \\ \times\ 9 \\ \hline \end{array}$

5. $\begin{array}{r} 32 \\ \times\ 4 \\ \hline \end{array}$

6. $\begin{array}{r} 75 \\ \times\ 3 \\ \hline \end{array}$

Problem Solving Real World

Use the table for Problems 7–9.

7. If a cow eats 43 pounds of feed in one week, how many pounds do 7 cows eat?

_____

Animal Feed at the Ranch	
Animal	**Pounds of Feed**
Cow	43
Hog	37
Steer	51

8. There are 3 female hogs and 5 male hogs. How many pounds of feed do they eat altogether?

_____

9. How many more pounds of feed do 5 steer eat than 5 cows?

_____

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Lesson Check

Fill in the bubble completely to show your answer.

10. The soccer league has 28 teams. Each team has 9 players. How many players are there in all?

Ⓐ 72 players

Ⓑ 152 players

Ⓒ 289 players

Ⓓ 252 players

11. An apple orchard has 8 rows of trees. Each row has 34 trees. How many trees are in the orchard?

Ⓐ 272 trees

Ⓑ 332 trees

Ⓒ 172 trees

Ⓓ 348 trees

12. On a school trip, there are 4 buses of students. Each bus holds 58 students. How many students go on the school trip?

Ⓐ 458 students

Ⓑ 132 students

Ⓒ 532 students

Ⓓ 232 students

13. A train travels 47 miles between two cities. If the train makes 4 trips in one day, how many miles does it travel?

Ⓐ 167 miles

Ⓑ 128 miles

Ⓒ 188 miles

Ⓓ 168 miles

Spiral Review

14. Mateo's school is having a family game night. Each table has 4 players. There are 7 tables in all. How many players are at game night?

_____

15. Jean is thinking of an even number between 410 and 430. The sum of the digits is 12. What is Jean's number?

_____

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