

Standards:

MGSE4.NBT.5 multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain multiplication calculations by using equations, rectangular arrays, and/or area models.

Find the Product:	Estimate the Product
1. $45 \times 64 =$	2. $45 \times 64 =$
3. $5 \times 3,216 =$	4. $5 \times 3,216 =$

Problem Solving:

5. Haley made 850 cupcakes. Parks made twice as many cupcakes as Haley. Which expression could be used to show how many cupcakes Parks made?

A. $850 + 2$

B. 850×2

C. 850×12

D. 850×850

6. How many cupcakes did Parks make? _____

7. For the school Veteran's Day performance, 30 rows of chairs are set up in the auditorium. There are 35 chairs in each row. How many chairs are there in all?

8. Benny biked 19 miles each day on a 5-day biking trip. Liam biked 26 miles each day on his 9-day biking trip. How many more miles did Liam bike than Benny?

9. Part A: A page of nametags has 15 labels. There are 24 sheets of nametag labels in one package. How many nametag labels are in one package? Show your work.

Part B: A store has 6 packages of the nametag labels. What is the total number of nametag labels the store has? (Use your answer from part A to solve.) Show your work.

10. Laura made \$42 each month for 11 months selling lemonade. She saved \$367 of what she earned and spent the rest. Which statement explains one way Laura could find the amount she spent?

- A. Add the sum of 42 and 11 to 367.
- B. Add 367 to the product of 42 and 11.
- C. Subtract the sum of 30 and 11 from 194.
- D. Subtract 367 from the product of 42 and 11.

Strategies: (Distributive Property, Expanded Form, Partial Products, Area Model)

11. Which expression shows how to multiply 8×563 by using expanded form and the Distributive Property?

- A. $(8 \times 5) + (8 \times 6) + (8 \times 3)$
- B. $(8 \times 500) + (8 \times 600) + (8 \times 3)$
- C. $(8 \times 500) + (8 \times 60) + (8 \times 3)$

12. A blank area model has been drawn below. Complete the area model for the multiplication expression $6 \times 2,134$. List the partial products and the final product.



What are the partial products?

13. What is the product of 6 and 2,134? _____

14. Tillie needs to find the value of 24×38 . Which expression represents 24×38 ?

- A. $(20 \times 8) + (4 \times 8)$
- B. $(20 \times 8) + (4 \times 8) + (4 \times 1)$
- C. $(20 \times 10) + (30 \times 4) + (8 \times 4)$
- D. $(20 \times 30) + (8 \times 20) + (30 \times 4) + (8 \times 4)$

15. Write the equation that should replace the question mark in the area model. _____

	30	9
20	$20 \times 30 = 600$?
8	$8 \times 30 = 240$	$8 \times 9 = 72$

What is the product of $28 \times 39 =$ _____

Answer Key:

1. 2,880

2. 3,000

3. 16,080

4. 15,000

5. B

6. 1,700

7. 1,050

8. 120 miles

9. Part A 360

9. Part B 2,160

10. D

11. C

12.

	2,000	100	30	4
6	12,000	600	180	24

Partial Products: $12,000 + 600 + 180 + 24$

13. 12,804

14. D

15. $20 \times 9 = 180$ Product: 1,092