NAME | **DATE**

🏠 The Pet Store   page 1 of 2

Note to Family

At school, we have started looking for efficient ways to find the total number of items in a group. We studied a picture of a pet store that was full of packages and containers. We worked to figure out how many items were in each package and then how many were in all the packages together. Sometimes, the arrangement of items was helpful—for example, a package of cat food had 2 rows of cans with 5 cans in each one. This made it easier to count by 2s or 5s to find the total. Watch how your child makes use of each of the arrangements in this assignment to help find the total.

Use the pictures to find the total for each problem below. Show your thinking with numbers, sketches, or words.

ex How many cans of dog food are there? How do you know?

4
4
4

DOG FOOD

4 + 4 + 4 = 12

1 How many cans of cat food are there? How do you know?

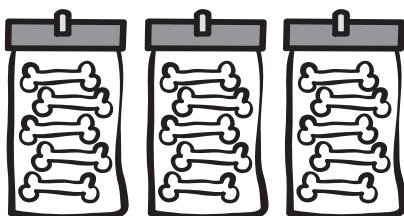**CAT FOOD**

14 cans
Explanations will vary.

2 How many balls are there in all? How do you know?

12 balls
Explanations will vary.

3 How many chew toys are there? How do you know?

15 chew toys
Explanations will vary.

(continued on next page)

NAME | **DATE**

The Pet Store page 2 of 2

4 Fill in the blanks.

$17 - 8 =$ __**9**__ $6 + 7 =$ __**13**__ $13 - 9 =$ __**4**__

$3 +$ __**7**__ $= 10$ $16 -$ __**8**__ $= 8$ $5 +$ __**10**__ $= 15$

$4 + 4 + 4 + 4 =$ __**16**__ $8 + 8 + 8 =$ __**24**__ $6 + 6 + 6 =$ __**18**__

5 **CHALLENGE** Molly's kitten weighed 3 pounds when she got her. Now the kitten has gained 4 pounds, and Molly's dog weighs 4 times as much as her kitten.

a How many pounds does the kitten weigh now?
Write equations to show your thinking.

The kitten weighs 7 pounds.
Work will vary. Example:
3 + 4 = 7 pounds

b How many pounds does the dog weigh? Write equations to show your thinking.

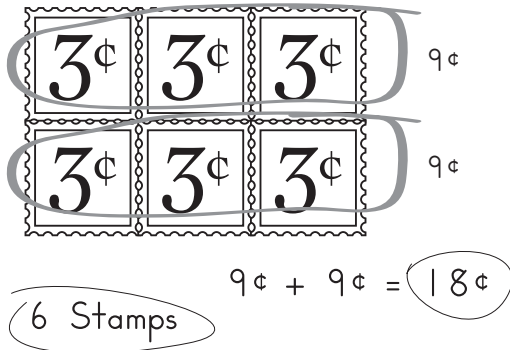**The dog weighs 28 pounds.**
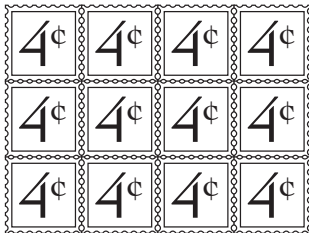**Work will vary. Example:**
7 × 4 = 28 pounds

🏠 Stamp Challenges page 1 of 2

Use the images to find the total for each problem below. Show your thinking with numbers, sketches, or words.

ex How many stamps do you see? What is the total cost of the stamps?

| 3¢ | 3¢ | 3¢ | 9¢ |
| 3¢ | 3¢ | 3¢ | 9¢ |

9¢ + 9¢ = 18¢

6 Stamps

1 How many stamps do you see? What is the total cost of the stamps?

4¢	4¢	4¢	4¢
4¢	4¢	4¢	4¢
4¢	4¢	4¢	4¢

12 stamps
48¢
Work will vary.

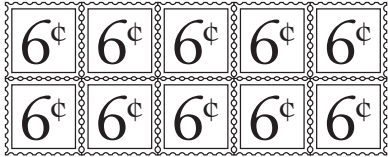**2** How many stamps do you see? What is the total cost of the stamps?

| 3¢ | 3¢ | 3¢ | 3¢ | 3¢ |
| 3¢ | 3¢ | 3¢ | 3¢ | 3¢ |

10 stamps
30¢
Work will vary.

(continued on next page)

Stamp Challenges page 2 of 2

3 How many stamps do you see? What is the total cost of the stamps?

6¢ 6¢ 6¢ 6¢ 6¢
6¢ 6¢ 6¢ 6¢ 6¢

**10 stamps
60¢
Work will vary.**

4 Explain your thinking with sketches, words, and equations.

a Stevie has 4 cards with 8 stamps on each card. Cindy has 8 cards with 4 stamps on each card. Who has more stamps, Stevie or Cindy?

**They have the same number of stamps.
They each have 32 stamps.
Work may vary.**

b **CHALLENGE** Liz bought sixteen 3¢ stamps and used them to mail two letters to her grandparents. If each letter used the same number of stamps, how much did it cost to mail each letter?

**24¢
Work may vary.**

c **CHALLENGE** Create a new set of stamps. Decide how many stamps you want in the array and how much each stamp costs. (They should all cost the same amount.) Then find the total cost of the stamps.
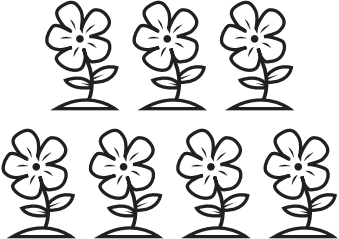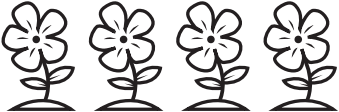
Responses will vary.

NAME | **DATE**

🏠 Leaves & Flower Petals page 1 of 2

Answer each question below. Write an addition or multiplication equation to show how you figured it out.

Answer the question.	Write an equation.
ex There are 3 flowers. How many *leaves?* 6	$2 + 2 + 2 = 6$ or $3 × 2 = 6$
1 There are 3 flowers. How many *petals?* **15**	$5 + 5 + 5 = 15$ or $3 × 5 = 15$
2 There are 7 flowers. How many *leaves?* **14**	$2 + 2 + 2 + 2 + 2 + 2 + 2 = 14$ or $7 × 2 = 14$
3 There are 4 flowers. How many *petals?* **20** **Equations will vary.**	$5 + 5 + 5 + 5 = 20$ or $4 × 5 = 20$ **Examples above.**

(continued on next page)

NAME | **DATE**

Leaves & Flower Petals page 2 of 2

Complete the following problems. Show your work using numbers, sketches, or words.

4 Mrs. Foley picked 27 flowers from her garden so her 3 children could each give a bouquet to their teachers. If each bouquet had the same number of flowers, how many flowers did each teacher get?

Each teacher got 9 flowers.
Work will vary.

5 Which equation describes the situation in problem 4 above?

○ $27 + 3 = n$ ● $3 \times n = 27$ ○ $n + 3 = 27$ ○ $27 \times 3 = n$

6 **CHALLENGE** Terry had 14 tulips and twice as many daffodils. How many flowers did Terry have in all?

Terry has 42 flowers.
Work will vary.

NAME _____ | **DATE** _____

🏠 Skip-Counting & More page 1 of 2

1 Skip-count forward from each number. A few of the numbers have been filled in for you.

3	6	9	**12**	**15**	**18**	**21**	**24**	**27**

4	8	**12**	**16**	**20**	**24**	28	**32**	**36**

5	**10**	**15**	**20**	**25**	30	**35**	**40**	45

2 a Solve the following problems.

$2 \times 10 =$ __**20**__ $4 \times 10 =$ __**40**__ $8 \times 10 =$ __**80**__

b What do you notice about these problems?

Responses will vary. Examples:
- **You multiply by 10 each time.**
- **In the product, the digit in the tens place is the same as the number you multiplied by 10.**

3 a Solve the following problems.

$4 \times 6 =$ __**24**__ $3 \times 8 =$ __**24**__ $2 \times 12 =$ __**24**__

b What do you notice about these problems?

Responses will vary. Examples:
- **The product is always 24.**
- **If you halve one number (4 ÷ 2 = 2) and double the other (6 × 2 = 12), the product is the same (4 × 6 = 2 × 12 = 24).**

NAME | **DATE**

Skip Counting & More page 2 of 2

4 Solve the following problems. Show your thinking using equations, sketches, or words.

a The greater roadrunner bird can run 14 miles per hour. That's 7 times faster than an ostrich can walk. How fast does an ostrich walk?

2 miles per hour.
Work will vary.

b **CHALLENGE** The body of a greater roadrunner is 16 inches long. Its tail is another 8 inches. The total length of a greater roadrunner is 4 times longer than a lovebird. How many inches long is the lovebird?

6 inches
Work will vary.

🏠 Story Problems & Number Line Puzzles page 1 of 2

Story Problems

1 Solve each problem. Use pictures, numbers, or words to show your thinking. Then write an equation for the problem.

a Roza is 4 years old. Her sister Elsa is twice as old as Roza. How old is Elsa?

8 years old
Work will vary.

Equation: _____ **4 × 2 = 8** _____

b Theo's baby brother, Thomas, is 24 inches tall. Theo is twice as tall as Thomas. How tall is Theo?

48 inches (4 feet)
Work will vary.

Equation: _____ **24 × 2 = 48** _____

c Savannah has read 4 pages in her new book. Carlos has read 4 times as many pages as Savannah. How many pages has Carlos read?

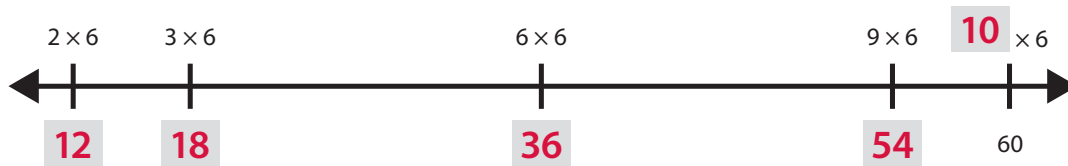**16 pages**
Work will vary.

Equation: _____ **4 × 4 = 16** _____

Story Problems & Number Line Puzzles page 2 of 2

Number Line Puzzles

2 Here is a number line puzzle. Use what you know about multiplication to fill in the blanks.

2×6 3×6 6×6 9×6 **10** $\times 6$

12 **18** **36** **54** 60

3 Use pictures, numbers, and words to solve the problem. Then select the equations that represent the problem.

a Tim saw some monkeys sitting in trees at the zoo. There were 6 monkeys sitting in each tree. There were 24 monkeys in all. How many trees were there?

4 trees
Work will vary.

b Which two equations describe the situation in problem 3a?
○ $24 + 6 = n$ ● $6 \times n = 24$ ○ $24 - 6 = n$ ● $24 \div 6 = n$

4 CHALLENGE The Turner family went bike camping at a state park near their city. It took them 4 hours of riding to get there from their house. For the first 2 hours they rode 12 miles per hour. For the last 2 hours they rode 9 miles per hour. How far is the state park campground from their house?

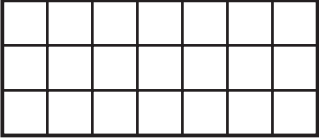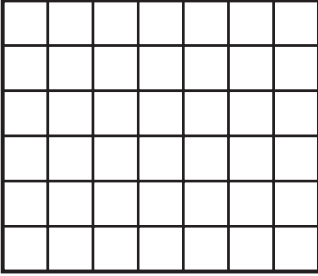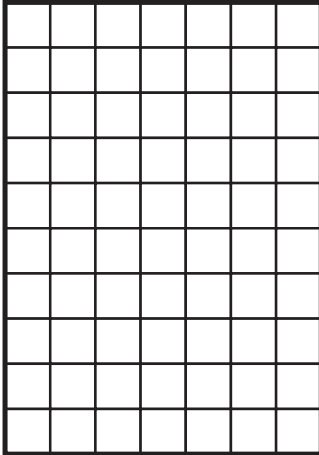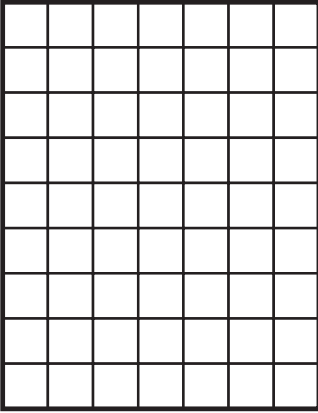**42 miles.**
Work will vary.

NAME | **DATE**

🏠 More Windows page 1 of 2

1 Figure out how many windowpanes are in each window. Show your thinking with words, numbers, and pictures. Write an equation for each problem.

a

Work will vary.

Equation **3 × 7 = 21 panes**

b

Equation **6 × 7 = 42 panes**

c

Work will vary.

Equation **10 × 7 = 70 panes**

d

Equation **9 × 7 = 63 panes**

2 Solve each equation below.

6 × 4 = 24   8 × **3** = 24   6 × 4 = **24**

10 × **4** = 40   5 × 8 = **40**   **8** × 5 = 40

3 × 9 = **27**   9 × **3** = 27   **9** × 3 = 27

(continued on next page)

NAME | DATE

More Windows page 2 of 2

3 Fill in the blanks in the skip-counts below.

a

4	8	12	16	20	24	28	32	36	40

b

6	12	18	24	30	36	42	48	54	60

4 Complete the problems below.

$2 \times 3 =$ __6__ $4 \times 3 =$ __12__ $8 \times 3 =$ __24__ $10 \times 3 =$ __30__ $9 \times 3 =$ __27__

5 Complete the Number Line Puzzle below.

2×9	3×9	5×9	6×9	9×9	**10** $\times 9$
18	27	45	54	81	90
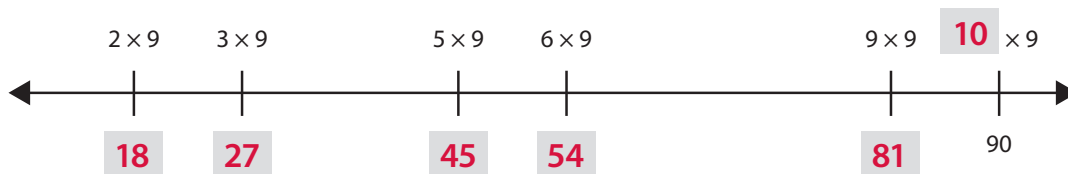
6 Solve each problem. Show your thinking with equations, sketches, or words.

a Carl can wash 8 windows in an hour. How many windows can he wash in 3 hours?

24 windows
Work will vary.

b **CHALLENGE** Sarah can wash 7 windows in an hour. Lilja can wash 4 windows in an hour. How many windows can Sarah and Lilja wash in 4 hours if they work together?

44 windows
Work will vary.

NAME | **DATE**

🏠 Mixed Practice page 1 of 2

Number Puzzles

1 Find the missing numbers in the equations below.

$5 \times \underline{\textbf{4}} = 20$ $\underline{\textbf{8}} \times 3 = 24$ $9 \times 3 = \underline{\textbf{27}}$

$4 + \underline{\textbf{10}} = 14$ $18 - \underline{\textbf{9}} = 9$ $\underline{\textbf{15}} - 7 = 8$

$4 \times \underline{\textbf{7}} = 28$ $8 \times 4 = \underline{\textbf{32}}$ $\underline{\textbf{6}} \times 6 = 36$

$16 - \underline{\textbf{7}} = 9$ $\underline{\textbf{5}} + 8 = 13$ $9 + \underline{\textbf{3}} = 12$

$8 \times 2 = \underline{\textbf{16}}$ $7 \times \underline{\textbf{5}} = 35$ $\underline{\textbf{4}} \times 3 = 12$

2 Are the following true or false? Why? **Explanations will vary.**

a $9 + 5 = 10 + 4$ (True) False Explain: **14 = 14**

b $9 - 5 = 10 - 4$ True (False) Explain: **4 ≠ 6**

c $9 \times 5 = 10 \times 4$ True (False) Explain: **45 ≠ 40**

Solve each problem. Show your thinking with equations, sketches, or words.

3 Suzie studies multiplication fact cards at home every Monday through Friday for 7 minutes on each of those days. How many minutes does she study the multiplication facts in a week?

35 minutes
Work will vary.

4 Jim paid $48 to buy a package of 6 flea treatments for his dog. How much does one flea treatment cost?

$ 8
Work will vary.

NAME | DATE

Mixed Practice page 2 of 2

5 CHALLENGE Each flea treatment usually lasts for about 4 weeks, but one year the fleas were especially bad. Jim's dog needed to be treated for fleas every 3 weeks until the weather cooled off.

a How many weeks of flea treatments would Jim's dog get from one package if each treatment only lasted 3 weeks?

18 weeks
Work will vary.

b In a normal year, when a flea treatment lasts 4 weeks, how many more weeks of treatments would Jim's dog get from one package?

6 more weeks
Work will vary.

6 CHALLENGE Bobby's favorite cupcakes come in packages of 4. He asked his grandma to buy them for a class party. She had to go to two grocery stores to get enough cupcakes for all the kids in the class. She bought 5 packages at the first store and 2 packages at the second store. How many cupcakes did Bobby's grandmother buy in all?
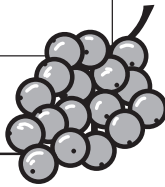
28 cupcakes
Work will vary.

NAME _____ | **DATE** _____

🏠 Grocery Shopping page 1 of 2

1 Fill in the tables below.

Grapes $3.00 per pound	
Number of Pounds	**Cost**
1	$3.00
2	**$6.00**
4	**$12.00**
5	$15.00
10	**$30.00**
20	**$60.00**

Potatoes $1.25 per pound	
Number of Pounds	**Cost**
1	$1.25
2	**$2.50**
4	**$5.00**
5	$6.25
10	**$12.50**
12	**$15.00**

Missing Numbers

2 Find the missing numbers in the equations below.

$3 \times \underline{\textbf{4}} = 12$ $\underline{\textbf{6}} \times 3 = 18$ $7 \times 3 = \underline{\textbf{21}}$

$5 \times \underline{\textbf{5}} = 25$ $7 \times 4 = \underline{\textbf{28}}$ $\underline{\textbf{5}} \times 6 = 30$

$6 \times 4 = \underline{\textbf{24}}$ $6 \times \underline{\textbf{6}} = 36$ $\underline{\textbf{6}} \times 2 = 12$

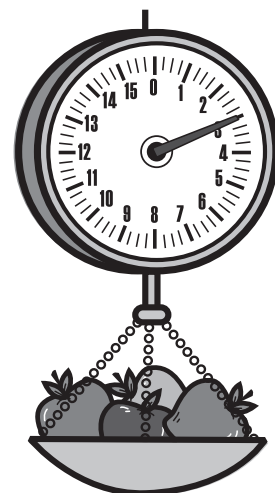*(continued on next page)*

Grocery Shopping page 2 of 2

3 Solve each problem. Show your thinking with equations, sketches, or words.

a A 10-pack of instant oatmeal costs $2.00. How much does each pack cost?

$0.20 (20¢)
Work will vary.

b CHALLENGE Oranges are 2 pounds for $1.00. Apples are $2.00 per pound. Chris bought 5 pounds of oranges and 3 pounds of apples. How much did Chris pay for all the fruit?
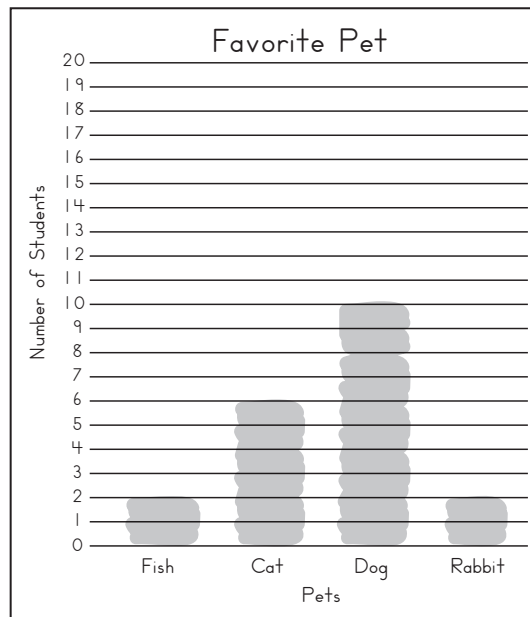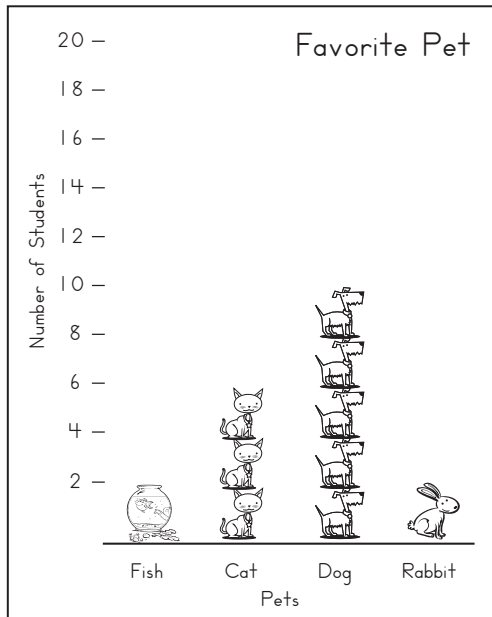
$8.50
Work will vary.

Favorite Pets page 1 of 2

1 Look at the two graphs below and then answer the following questions.

a Do the picture graph and the bar graph above represent the same data?

Yes

b Why or why not?

Explanations will vary. Example: *Each graph shows the same number of students for each pet.*

c Using the picture graph, tell how many students are in the class. Explain how you know.

20 students.
Explanations will vary.

d Using the bar graph, tell how many students are in the class. Explain how you know.

20 students.
Explanations will vary.

2 CHALLENGE Mr. Neon's class took a survey to find out everyone's favorite fruit. The number of votes for each fruit is listed below. On a separate sheet of paper, draw a picture graph that shows the information. Be sure your graph has a title and labels.

Bananas: 3   Apples: 7   Grapes: 6   Watermelon: 4   Strawberries: 4

Work will vary.   *(continued on next page)*

NAME | **DATE**

Favorite Pets page 2 of 2

Review

3   Conrad says that 8×7 is the same as 8×5 plus 8×2. Do you agree or disagree?
Explain your thinking.

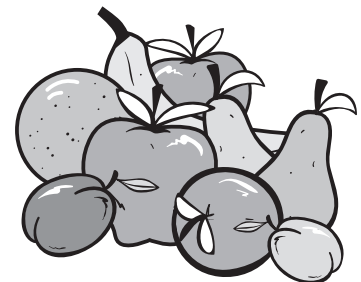<p style="text-align: center; color: #d6006d;">Conrad is correct.
Explanations will vary.</p>

4   Alexis says that 6×9 is the same as 6×9 plus 6×9. Do you agree or disagree?
Explain your thinking.

<p style="text-align: center; color: #d6006d;">Alexis is incorrect.
Explanations will vary.</p>

5   CHALLENGE Melea needs to provide 200 pieces of fruit for the local elementary
school. Melea has 15 baskets. Each basket has 9 pieces of fruit in it. Does Melea have
enough fruit? Show your thinking with numbers, pictures, or words.

<p style="text-align: center; color: #d6006d;">Melea does not have enough fruit, because
$9 \times 15 = 135$ and $135 < 200$.
Work will vary.</p>
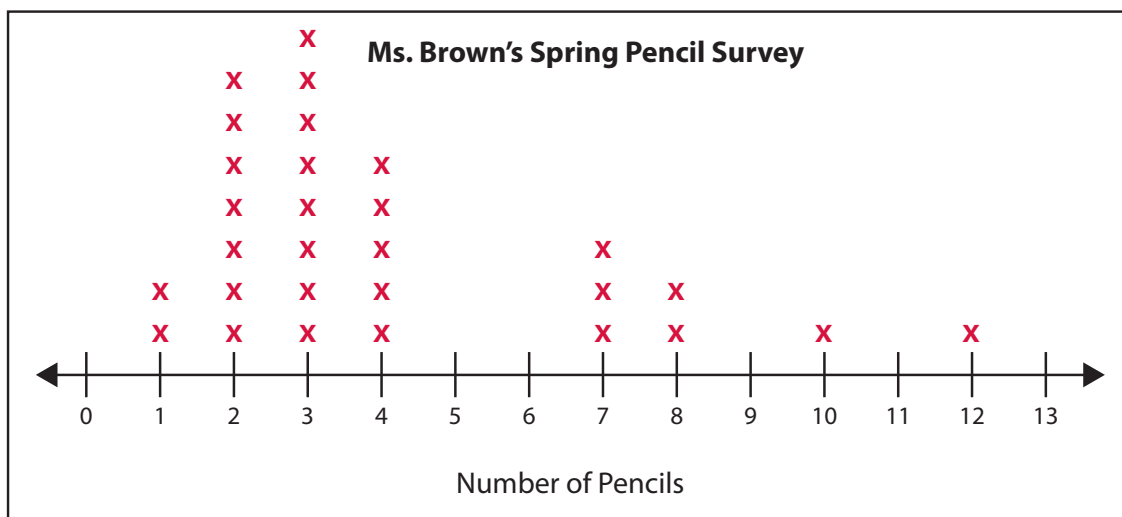
🏠 The Pencil Survey page 1 of 2

One day last spring, Ms. Brown asked her third graders to clean out their desks. She couldn't believe how many pencils most of the kids pulled out. "So that's where all the pencils have been!" she thought.

Ms. Brown decided to take a survey to find out how many pencils had been hiding in the kids' desks. The table below shows the survey results.

Number of Pencils	Number of Students
1	2
2	7
3	8
4	5
7	3
8	2
10	1
12	1

1 a Record the data on the line plot below.

Ms. Brown's Spring Pencil Survey

Number of Pencils

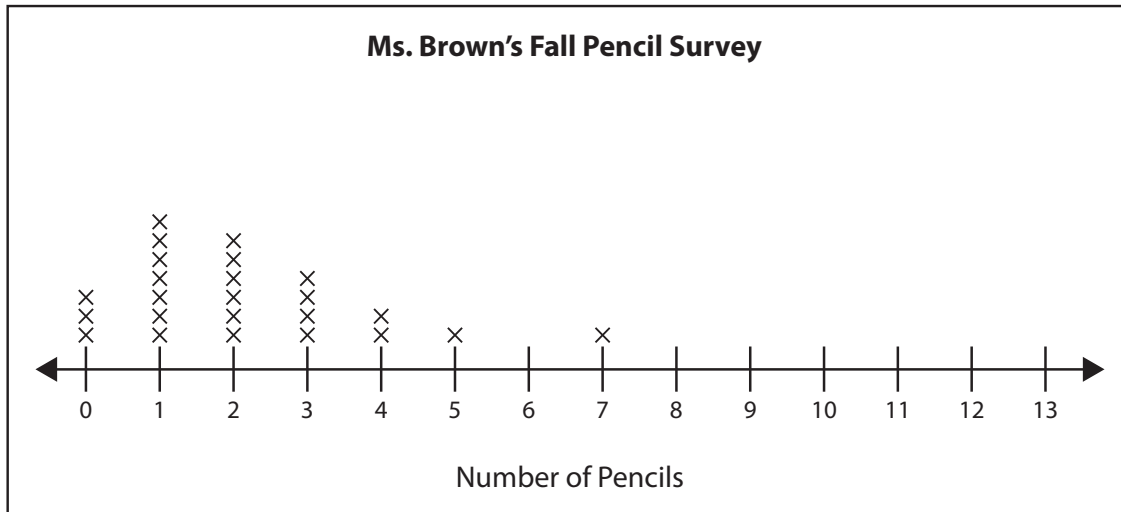**b** What was the most common number of pencils for a student to have in their desk in the spring?

3 pencils

(continued on next page)

NAME | **DATE**

The Pencil Survey page 2 of 2

2 a The next year, Ms. Brown thought, "I will ask the students to clean out their desks earlier this year so we don't run out of pencils so fast." The line plot below shows how many pencils the kids found in their desks that time.

Ms. Brown's Fall Pencil Survey

Number of Pencils

b What was the most common number of pencils for a student to have in their desk in the fall?

1 pencil

3 Were there more pencils hiding in the students' desks last spring (see problem 1) or in the fall (see problem 2)? Explain how you figured it out.

There were more pencils in the spring.
Explanations will vary.

4 **CHALLENGE** Exactly how many pencils were hiding in students' desks when Ms. Brown did the fall survey? (Hint: Be careful! The answer is not 24 pencils.)

51 pencils