

# Grado 5 Matemáticas

Paquete de actividades para el hogar del estudiante

Este Paquete de actividades para el hogar incluye un conjunto de 27 problemas prácticos que están alineados con importantes conceptos de matemáticas en los que sus estudiantes ya han trabajado durante este año.

Se recomienda que el estudiante complete una página de problemas de práctica cada día.

Anime al estudiante a hacer su mejor esfuerzo al trabajar en este contenido. Lo más importante es que continúe desarrollando sus habilidades y fluidez en matemáticas.

iMire los conceptos de Matemáticas del Grado 5 que cubre este paquete!



## Grado 5 Conceptos de matemáticas cubiertos en este paquete

<b>Concept</b> Concepto			<b>Page</b> Página
	1	Understanding of Place Value (Comprender Valor posicional)	4
	2	Understanding Powers of 10 (Comprender Potencias de 10)	5
Understanding the Place Value System Comprender el sistema de valor posicional	3	Reading a Decimal in Word Form (Leer decimales en palabras)	6
	4	Writing a Decimal in Standard Form (Escribir un decimal en forma estándar)	7
	5	Comparing Decimals (Comparar decimales)	8
	6	Rounding Decimals (Redondear decimales)	9
Understanding Multiplication and Division with Whole Numbers Comprender la multiplicación y la división con números enteros	7	Multiplying Multi-Digit Whole Numbers (Multiplicar números enteros de varios dígitos)	10
	8	Multiplying with the Standard Algorithm (Multiplicar con algoritmo convencional)	11
	9	Using Estimation and Area Models to Divide (Usar estimación y modelos de área para dividir)	12
	10	Using Area Models and Partial Quotients to Divide (Usar modelos de área y cocientes parciales para dividir)	13
Understanding Addition and	11	Adding Decimals (Sumar decimales)	14
Subtraction with Decimals Comprender la suma y la resta con decimales	12	Subtracting Decimals to Hundredths (Restar decimales hasta centésimas)	15
	13	Using Estimation with Decimals (Usar estimación con decimales)	16
Understanding Multiplication and Division with Decimals	14	Multiplying a Decimal by a Whole Number (Multiplicar un decimal por un número entero)	18
	15	Multiplying Decimals Less Than 1 (Multiplicar decimales menores de 1)	
	16	Multiplying with Decimals Greater Than 1 (Multiplicar con decimales mayores de 1)	20
Comprender la multiplicación y la división con decimales	17	Dividing a Decimal by a Whole Number (Dividir un decimal por un número entero)	21
	18	Dividing by Hundredths (Dividir por centésimas)	22



#### Grade 5 Math concepts covered in this packet (Continued)

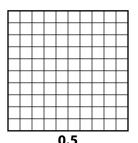
<b>Concept</b> <i>Concepto</i>	<b>Practice</b> <i>Práctica</i>	<b>Fluency and Skills Practice</b> <i>Fluidez y práctica de destrezas</i>	<b>Page</b> Página
	19	Adding Fractions with Unlike Denominators (Sumar fracciones con distintos denominadores)	23
Understanding Addition and Subtraction with Fractions Comprender la suma y la resta con fracciones	20	Adding with Mixed Numbers (Sumar con números mixtos)	24
	21	Subtracting Fractions with Unlike Denominators (Restar fracciones con distintos denominadores)	25
	22	Subtracting with Mixed Numbers (Restar números mixtos)	26
	23	Estimating in Word Problems with Fractions (Hacer estimaciones en problemas verbales con fracciones)	28
Extending Multiplication and Division to Fractions Ampliar la multiplicación y la división a las	24	Fractions as Division (Fracciones como división)	29
	25	Understanding of Multiplying by a Fraction (Comprender la multiplicación por una fracción)	30
	26	Multiplying Unit Fractions to Find Area (Multiplicar fracciones unitarias para hallar el área)	31
fracciones	27	Tiling a Rectangle to Find Area (Hallar el área con el teselado de un rectángulo)	32

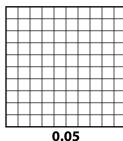


# **Understanding of Place Value**

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

1 The decimal grid in each model represents 1 whole. Shade each model to show the decimal number below the model.





Complete the comparison statements.

Complete the equations.

$$0.05 \times _{---} = 0.5$$

2 Draw a number line from 0 to 2. Then draw and label points at 2 and 0.2.

**←** 

Use the number line to explain why 2 is 10 times the value of 0.2.

Complete the equations to show the relationship between 2 and 0.2.

3 Which type of model do you like best? Explain why.

## **Understanding Powers of 10**

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

Multiply or divide.

$$3 6 \div 10^2$$

4 
$$0.6 \div 10^2$$

$$6 \div 10^3$$

$$60 \div 10^3$$

8 
$$0.3 \times 10^2$$

9 
$$0.3 \times 10^3$$

10 
$$0.03 \times 10^2$$

11 
$$0.003 \times 10^2$$

12 
$$0.03 \times 10^3$$

14 
$$0.72 \times 10^2$$

15 
$$7,200 \div 10^3$$

16 
$$20 \div 10^2$$

17 
$$0.9 \times 10^3$$

18 
$$0.001 \times 10^2$$

**20** 
$$150 \div 10^3$$

21 
$$0.46 \times 10^3$$

22 What strategies did you use to solve the problems? Explain.

# Reading a Decimal in Word Form

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

What is the word form of each decimal?

1 0.2

2 0.02

3 0.002

4 0.12

5 0.012

6 0.102

7 1.002

8 9.4

9 90.04

10 0.94

11 500.2

12 8.008

**13** 700.06

14 6.335

**15** 3,000.001

16 What strategies did you use to help you read the decimals? Explain.

#### **Writing a Decimal in Standard Form**

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

What decimal represents each number?

3 
$$6 \times 1 + 5 \times \frac{1}{10}$$

5 
$$2 \times 10 + 7 \times \frac{1}{10} + 3 \times \frac{1}{100}$$

6 
$$4 \times 1 + 1 \times \frac{1}{100} + 9 \times \frac{1}{1,000}$$

8 
$$8 \times 100 + 2 \times \frac{1}{10} + 8 \times \frac{1}{1,000}$$

9 
$$2 \times 1 + 4 \times \frac{1}{100}$$

11 
$$7 \times 100 + 2 \times 10 + 3 \times 1 + 6 \times \frac{1}{10}$$

13 
$$3 \times 1,000 + 6 \times 100 + 3 \times 10 + 7 \times \frac{1}{10} + 2 \times \frac{1}{100} + 8 \times \frac{1}{1,000}$$

14 nine hundred fifty-six and four hundred twenty-seven thousandths

How was writing decimals for numbers in word form different from numbers in expanded form?

#### **Comparing Decimals**

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

Write the symbol <, =, or > in each comparison statement.

1 0.02 \_\_\_\_\_ 0.002

2 0.05 \_\_\_\_\_ 0.5

3 0.74 \_\_\_\_\_ 0.84

4 0.74 \_\_\_\_\_ 0.084

**5** 1.2 \_\_\_\_\_ 1.25

**6** 5.130 \_\_\_\_\_ 5.13

**7** 3.201 \_\_\_\_\_ 3.099

8 0.159 \_\_\_\_\_ 1.590

9 8.269 \_\_\_\_\_ 8.268

10 4.60 \_\_\_\_\_ 4.060

11 302.026 \_\_\_\_\_ 300.226

12 0.237 \_\_\_\_\_ 0.223

**13** 3.033 \_\_\_\_\_ 3.303

**14** 9.074 \_\_\_\_\_ 9.47

**15** 6.129 \_\_\_\_\_ 6.19

**16** 567.45 \_\_\_\_\_ 564.75

**17** 78.967 \_\_\_\_\_ 78.957

18 5.346 \_\_\_\_\_ 5.4

19 12.112 \_\_\_\_\_ 12.121

20 26.2 \_\_\_\_\_ 26.200

**21** 100.32 \_\_\_\_\_ 100.232

What strategies did you use to solve the problems? Explain.

#### **Rounding Decimals**

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

Round each decimal to the nearest tenth.

1 0.32

2 3.87

3 0.709

4 12.75

**5** 12.745

6 645.059

Round each decimal to the nearest hundredth.

7 1.079

8 0.854

9 0.709

10 12.745

11 645.059

**12** 50.501

Round each decimal to the nearest whole number.

**13** 1.47

14 12.5

**15** 200.051

Write two different decimals that are the same value when rounded to the nearest tenth. Explain why the rounded values are the same.

Round 1.299 to the nearest tenth and to the nearest hundredth. Explain why the rounded values are equivalent.

## **Multiplying Multi-Digit Whole Numbers**

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

Estimate. Circle all the problems with products between 3,000 and 9,000. Then find the exact products of only the problems you circled.

16 What strategies did you use to solve the problems? Explain.

## **Multiplying with the Standard Algorithm**

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

The answers are mixed up at the bottom of the page. Cross out the answers as you complete the problems.

#### Answers

# Using Estimation and Area Models to Divide

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

Check each answer by multiplying the divisor by the quotient. If the answer is incorrect, cross out the answer and write the correct answer.

Student Answers	
48 43	Check: 12 × 48 = 576
27	
57	
22	
23	
14	
82	
24	
	48 43 27 57 22 23 14

Explain how you could know that the answers to two of the problems are incorrect without multiplying.

Estimate. Circle all the problems that will have quotients greater than 30. Then find the exact quotients of only the problems you circled.

Select a problem you did not circle. Describe two different ways you could use estimation to tell the quotient is not greater than 30.

### **Adding Decimals**

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

Circle all the problems with sums less than 5.
Then find the exact sums of only the problems you circled.

11 1.809 + 3.091

#### **Subtracting Decimals to Hundredths**

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

The answers are mixed up at the bottom of the page. Cross out the answers as you complete the problems.

1 
$$7.5 - 1.2$$

#### **Answers**

15

<b>Using Estimation with Decimals</b>	<b>Using</b>	<b>Estim</b>	ation	with	Decim	hals
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Name: \_\_\_\_\_

#### Solve the problems.

Lori needs at least 12 liters of water to fill a water cooler. She has a container with 4.55 liters of water, a container with 3.25 liters of water, and a container with 4.85 liters of water. Does she have enough water? Use estimation only to decide. Explain why you are confident in your estimate.

Nia wants the total weight of her luggage to be no more than 50 kilograms. She has three suitcases that weigh 15.8 kilograms, 17.42 kilograms, and 16.28 kilograms. Is the total weight within the limit? Use only estimation to decide. Explain how you know your estimate gives you the correct answer.

Omar measures one machine part with length 4.392 centimeters and another part with length 6.82 centimeters. What is the difference in length? Use estimation to check your answer for reasonableness.



Using	<b>Estimation</b>	on with D	ecimals	continued
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Name: \_\_\_\_\_

4 Kyle wants to buy a hat for \$5.75, a T-shirt for \$7.65, and a keychain for \$3.15. He has \$16. Does he have enough money? Use estimation only to decide. Explain why you are confident in your estimate.

For his hiking club, Ricardo is making a container of trail mix with 3.5 kilograms of nuts. He has 1.78 kilograms of peanuts and 0.625 kilograms of almonds. The rest of the nuts will be cashews. How many kilograms of cashews does he need? Use estimation to check your answer for reasonableness.

6 Suppose you want to be sure that the total cost of three items does not go over a certain amount. How can you use estimation only to solve the problem?

# Multiplying a Decimal by a Whole Number

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

Multiply.

10  $21 \times 0.05$ 

19 How did you know where to put the decimal point in problem 6?

## **Multiplying Decimals Less Than 1**

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

Multiply.

1 
$$0.5 \times 3$$

$$20.5 \times 0.3$$

$$3.0.5 \times 0.03$$

4 
$$6 \times 0.2$$

5 
$$0.6 \times 0.2$$

6 
$$0.06 \times 0.2$$

7 
$$0.8 \times 0.1$$

8 
$$0.8 \times 0.2$$

9 
$$0.8 \times 0.3$$

10 
$$0.4 \times 0.02$$

11 
$$0.4 \times 0.04$$

12 
$$0.4 \times 0.12$$

13 
$$0.3 \times 0.4$$

14 
$$0.6 \times 0.4$$

15 
$$0.6 \times 0.8$$

17 
$$0.05 \times 0.5$$

\_\_\_\_

16  $0.01 \times 0.5$ 

\_\_\_\_

Describe a pattern you noticed when you were completing the problem set.

## **Multiplying with Decimals Greater Than 1**

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

The answers are mixed up at the bottom of the page. Cross out the answers as you complete the problems.

1 
$$0.3 \times 1.2$$

$$21.2 \times 0.4$$

6 
$$0.02 \times 1.8$$

8 
$$6.6 \times 0.02$$

9 
$$2.4 \times 4.8$$

14 
$$4.25 \times 8.5$$

#### **Answers**

# Dividing a Decimal by a Whole Number

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

Multiply to check if the student's answer is reasonable. If not, cross out the answer and write the correct quotient.

Division Problems	Student Answe	ers
0.88 ÷ 11	0.08	Product: 11 × 0.8 = 8.8
5.6 ÷ 8	0.07	
7.2 ÷ 9	0.8	
25.35 ÷ 5	5.7	
21.7 ÷ 7	3.1	
14.4 ÷ 12	0.12	
96.16 ÷ 8	12.2	
60.18 ÷ 2	30.9	
	1	

1 Can an answer be incorrect even if it looks reasonable? Explain.

# **Dividing by Hundredths**

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

Divide.

$$3.75 \div 0.25$$

4 
$$6.5 \div 0.25$$

-

16 Describe a pattern you noticed when you were completing the problem set.

#### Adding Fractions with Unlike Denominators

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

Add.

$$\frac{1}{2} + \frac{1}{4}$$

$$\frac{1}{2} + \frac{3}{8}$$

$$\frac{1}{2} + \frac{1}{3}$$

$$\frac{1}{3} + \frac{1}{4}$$

$$\frac{5}{6} + \frac{1}{12}$$

6 
$$\frac{1}{3} + \frac{2}{5}$$

$$\frac{5}{6} + \frac{2}{3}$$

$$\frac{3}{4} + \frac{5}{6}$$

$$9 \frac{7}{9} + \frac{1}{6}$$

10 
$$\frac{7}{8} + \frac{2}{3}$$

11 
$$\frac{3}{2} + \frac{3}{5}$$

12 
$$\frac{9}{8} + \frac{5}{6}$$

What is a different common denominator you could use in problem 2? Describe how you would add the fractions using this different common denominator. Is the result equivalent to the sum found in problem 2?

## Adding with Mixed Numbers

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

Add.

1 
$$4\frac{7}{8} + \frac{1}{8}$$

2 
$$4\frac{7}{8} + \frac{1}{4}$$

3 
$$4\frac{7}{8} + \frac{1}{2}$$

4 
$$2\frac{3}{4} + \frac{1}{3}$$

$$5 \ 2\frac{3}{4} + \frac{2}{3}$$

6 
$$2\frac{3}{4} + \frac{5}{6}$$

7 
$$1\frac{2}{5} + 1\frac{1}{2}$$

8 
$$2\frac{4}{5} + 3\frac{1}{2}$$

9 
$$3\frac{2}{3} + 3\frac{2}{5}$$

10 
$$4\frac{5}{8} + 2\frac{2}{3}$$

11 
$$5\frac{3}{4} + 2\frac{3}{5}$$

12 
$$3\frac{5}{6} + 2\frac{7}{8}$$

13 What strategy did you use to solve problem 3? Describe each step.

# **Subtracting Fractions with Unlike Denominators**

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

Subtract.

$$\frac{1}{2} - \frac{1}{4}$$

$$\frac{1}{2} - \frac{3}{8}$$

$$\frac{1}{2} - \frac{1}{3}$$

$$\frac{1}{3} - \frac{1}{4}$$

$$\frac{5}{6} - \frac{5}{12}$$

6 
$$\frac{3}{4} - \frac{1}{6}$$

$$7 \frac{7}{8} - \frac{3}{4}$$

$$\frac{1}{2} - \frac{2}{5}$$

$$9 \ \frac{3}{4} - \frac{3}{5}$$

10 
$$\frac{2}{3} - \frac{3}{5}$$

11 
$$\frac{5}{6} - \frac{3}{8}$$

12 
$$\frac{7}{8} - \frac{2}{3}$$

13 How could you check your work in problem 4? Describe each step.

### **Subtracting with Mixed Numbers**

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

Subtract.

1 
$$2\frac{1}{8} - \frac{1}{4}$$

$$2 2\frac{1}{8} - \frac{1}{2}$$

3 
$$2\frac{1}{8} - \frac{3}{4}$$

4 
$$2\frac{1}{2} - \frac{2}{3}$$

$$5 \ 2\frac{1}{4} - 1\frac{1}{3}$$

6 
$$3\frac{1}{6} - 1\frac{3}{4}$$

$$7\frac{2}{5} - 3\frac{1}{2}$$

$$5\frac{3}{8}-4\frac{1}{6}$$

9 
$$8\frac{2}{3} - 3\frac{4}{5}$$

10 
$$6\frac{2}{5} - 3\frac{3}{4}$$

11 
$$9\frac{3}{8} - 3\frac{2}{3}$$

12 
$$14\frac{1}{8} - 9\frac{5}{6}$$

\_\_\_\_

13 What pattern did you notice in problems 1 through 3? Explain how this helped you subtract.

# Estimating in Word Problems with Fractions

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

Solve the problems. Estimate to tell if your solution is reasonable. Show your work.

Im mails one package that weighs  $\frac{3}{8}$  pound and another that weighs  $\frac{2}{3}$  pound. What is the total weight of both packages?

Rosa needs  $5\frac{1}{4}$  yards of ribbon for a crafts project. She already has  $2\frac{7}{8}$  yards of ribbon. How many more yards of ribbon does she need to buy?

To make fruit punch, Tyrone needs  $3\frac{3}{8}$  quarts of orange juice and  $3\frac{3}{4}$  quarts of cranberry juice. How many quarts of juice does he need in all?

# **Estimating in Word Problems** with Fractions continued

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

Lin spent  $\frac{5}{6}$  hour on math homework and  $1\frac{3}{4}$  hours on science homework. How many hours in all did she spend on homework for both subjects?

Sandra rode her bike  $9\frac{1}{3}$  miles on Monday and  $6\frac{4}{5}$  miles on Tuesday. How many more miles did she ride on Monday than on Tuesday?

6 How can you make a high estimate for the sum of two fractions in a word problem?

#### **Fractions as Division**

#### Solve each problem.

- 1 Roger has 4 gallons of orange juice. He puts the same amount of juice into each of 5 pitchers. How many gallons of orange juice are in 1 pitcher?
- 2 Marta has 8 cubic feet of potting soil and 3 flower pots. She wants to put the same amount of soil in each pot. How many cubic feet of soil will she put in each flower pot?

- Greg made 27 ounces of potato salad to serve to 10 guests at a picnic. If each serving is the same size, how much potato salad will each guest receive?
- 4 Chandra spends 15 minutes doing 4 math problems. She spends the same amount of time on each problem. How many minutes does she spend on each problem?

- Taylor has 5 yards of gold ribbon to decorate 8 costumes for the school play. She plans to use the same amount of ribbon for each costume. How many yards of ribbon will she use for each costume?
- DeShawn is using 7 yards of wire fencing to make a play area for his puppy. He wants to cut the fencing into 6 pieces of equal length. How long will each piece of fencing be?

7 What is a division word problem that can be represented by  $\frac{4}{3}$ ?

# Understanding of Multiplying by a Fraction

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

1 Draw a number line model to represent each multiplication problem. Then solve the problem.

$$\frac{2}{3} \times \frac{1}{2}$$

$$\frac{2}{3} \times \frac{1}{2} =$$



$$\frac{5}{6} \times \frac{3}{4}$$

$$\frac{5}{6} \times \frac{3}{4} =$$

2 Draw an area model to represent each multiplication problem. Then solve the problem.

$$\frac{4}{5} \times \frac{2}{3}$$

$$\frac{4}{5} \times \frac{2}{3} =$$

$$\frac{3}{4} \times \frac{1}{6}$$

$$\frac{3}{4} \times \frac{1}{6} =$$

3 What type of model do you like best? Explain why.

#### **Multiplying Unit Fractions to Find Area**

Each multiplication problem is used to find the area of a rectangle. Write the missing digits in the boxes to make each multiplication problem true.

1 length:  $\frac{1}{2}$  unit width:  $\frac{1}{8}$  unit

$$\frac{1}{2} \times \frac{1}{8} = \frac{1}{2} \times \frac{1}{3} = \frac{1}$$

2 length:  $\frac{1}{3}$  unit

width:  $\frac{1}{4}$  unit

- 3 length:  $\frac{1}{2}$  unit width:  $\frac{1}{3}$  unit

4 length:  $\frac{1}{2}$  unit width:  $\frac{1}{5}$  unit

$$\frac{1}{2} \times \frac{1}{5} =$$
 square unit  $\frac{1}{4} \times \frac{1}{4} =$ 

5 length:  $\frac{1}{4}$  unit

width:  $\frac{1}{4}$  unit

$$\frac{1}{4} \times \frac{1}{4} =$$

6 length:  $\frac{1}{3}$  unit

width:  $\frac{1}{8}$  unit

$$\frac{1}{3} \times \frac{1}{8} = \boxed{\phantom{0}}$$

7 length:  $\frac{1}{2}$  unit width:  $\frac{1}{7}$  unit

$$\frac{1}{2} \times \frac{1}{7} = \boxed{\phantom{0}}$$

8 length:  $\frac{1}{3}$  unit

width:  $\frac{1}{10}$  unit

$$\frac{1}{3} \times \frac{1}{10} =$$
 square unit  $\frac{1}{6} \times \frac{1}{5} =$  square unit

9 length:  $\frac{1}{5}$  unit

width:  $\frac{1}{6}$  unit

$$\frac{1}{6} \times \frac{1}{5} = \frac{1}{1}$$
 square unit

10 Write missing digits in the boxes to make two different multiplication problems that are both true.

$$\frac{1}{\boxed{}} \times \frac{1}{4} = \frac{1}{\boxed{}}$$

$$\frac{1}{\boxed{\phantom{1}}} \times \frac{1}{4} = \frac{1}{\boxed{\phantom{1}}}$$

### **Tiling a Rectangle to Find Area**

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

Each multiplication problem is used to find the area of a rectangle. Write each product.

1 length:  $\frac{1}{2}$  unit width:  $\frac{1}{3}$  unit

 $\frac{1}{2} \times \frac{1}{3}$ 

\_\_\_\_\_ square unit

2 length:  $\frac{2}{3}$  unit width:  $\frac{1}{2}$  unit

 $\frac{2}{3} \times \frac{1}{2}$ 

\_\_\_\_\_ square unit

3 length:  $\frac{3}{2}$  unit width:  $\frac{2}{3}$  unit

 $\frac{3}{2} \times \frac{2}{3}$ 

\_\_\_\_\_square unit

4 length:  $\frac{1}{3}$  unit width:  $\frac{1}{4}$  unit

 $\frac{1}{3} \times \frac{1}{4}$ 

\_\_\_\_\_ square unit

5 length:  $\frac{3}{4}$  unit width:  $\frac{1}{3}$  unit

 $\frac{3}{4} \times \frac{1}{3}$ 

\_\_\_\_\_ square unit

6 length:  $\frac{5}{3}$  unit width:  $\frac{3}{4}$  unit

 $\frac{5}{3} \times \frac{3}{4}$ 

\_\_\_\_\_ square unit

7 length:  $\frac{3}{5}$  unit width:  $\frac{1}{2}$  unit

 $\frac{3}{5} \times \frac{1}{2}$ 

\_\_\_\_\_ square unit

8 length:  $\frac{3}{2}$  unit width:  $\frac{3}{5}$  unit

 $\frac{3}{2} \times \frac{3}{5}$ 

\_\_\_\_\_ square unit

9 length:  $\frac{3}{2}$  unit width:  $\frac{6}{5}$  unit

 $\frac{3}{2} \times \frac{6}{5}$ 

\_\_\_\_\_ square unit

Describe how you could modify one tiling diagram to solve problems 1 through 3.