

# 4<sup>th</sup> Grade Math

## Parent Information

### Packet #3

- Recommended daily math practice time: 20 minutes
- There are 4 “Unit Assessments” to review key concepts from this year. Answer keys are at the end of the document. The recommendation is to work through all of these over the course of 2 weeks, at a comfortable pace for your student.
- There are 15 “fluency practice” pages – addition, subtraction, multiplication, and division as well as fractions. Recommendation is to work 5-10 minutes each day from pages of your student’s choice. However, the goal is practice and remembering how to work problems correctly. Adjust the number of problems based on how long it takes your student to complete. There are more than 2 weeks’ worth of fluency practice to allow for choice and additional practice in the summer if desired. These can all be checked with a calculator. Students are encouraged to correct any problems missed.
- There are 6 “Activity” pages – Recommendation is 2-3 “Activities” per week for 10 minutes each activity. These activities can be repeated for extra practice. Answer keys are at the end of the document.

### Additional Ideas that can be practiced daily or every other day:

- Read and write numbers less than or equal to 1,000,000 using standard form, word form, and expanded form.
  - Example: four thousand two hundred fifty six =  $4,256 = 4 \times 1000 + 2 \times 100 + 5 \times 10 + 6 \times 1$
- Add and subtract within 1,000,000 – Have your child create numbers to add or subtract. Use a calculator to check.
- Multiply up to four digits by one digit numbers. Use a calculator to check.
- Multiply two two-digit numbers. Use a calculator to check.
- Continue practicing multiplication and division facts up to  $12 \times 12$  (or higher if desired). Your child could create their own flash cards with a fact and a picture/array to illustrate. Another option is to write the fact families for the facts. Example:  $5 \times 2 = 10$ ;  $2 \times 5 = 10$ ;  $10 \div 2 = 5$ ;  $10 \div 5 = 2$ .

**Ready® Mathematics****Unit 1 Unit Assessment****Form B****Solve the problems.****1** Which show ways to make 2,067? Circle all that apply.

- A** 2 thousands + 6 hundreds + 0 tens + 7 ones
- B** 20 hundreds + 6 tens + 7 ones
- C** 20 tens + 67 ones
- D** 206 tens + 7 ones
- E** 2,067 ones

**2** During one month, 9,805 vehicles passed a store on weekdays. On weekends during that month, 12,053 vehicles passed the same store. Did more vehicles pass the store on weekdays or weekends? Use  $>$ ,  $<$ , or  $=$  to write a comparison.

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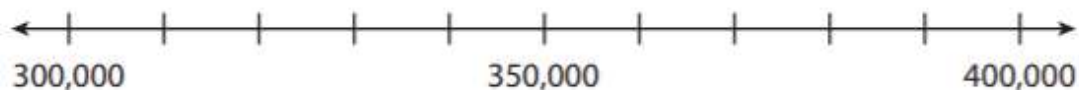
**3** Tell whether the digit 7 in each number has the same value as the digit 7 in 20,176.

- a.** 27,026                       Yes    No
- b.** 18,173                       Yes    No
- c.** 6,795                         Yes    No
- d.** 479                             Yes    No



**Unit 1 Unit Assessment** *continued***Form B**

- 4** Use the number line. Tell whether each statement is *True* or *False*.



- a. 353,070 rounded to the nearest hundred thousand is 300,000.  True  False
- b. 362,281 rounded to the nearest hundred thousand is 400,000.  True  False
- c. 321,935 rounded to the nearest ten thousand is 320,000.  True  False
- d. 374,289 rounded to the nearest ten thousand is 380,000.  True  False

- 5** The Washington County Fair had 324,596 visitors one summer. The Jefferson County Fair had 452,801 visitors.

**Part A**

How many fewer visitors did the Washington County Fair have than the Jefferson County Fair?

**Show your work.**

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**Part B**

Raul said that both county fairs had a total of 776,397 visitors. Is Raul correct? Explain.

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**Unit 1 Unit Assessment** *continued***Form B**

**6** Which number is one hundred thousand less than 683,204?

- A 783,204
- B 684,204
- C 682,204
- D 583,204

**7** Taxi A has gone 40,502 miles. Taxi B has gone 43,052 miles. Taxi C has gone 34,520 miles. Complete the place-value chart. Which taxi has gone the least number of miles? Explain.

	Ten Thousands	Thousands	Hundreds	Tens	Ones
Taxi A					
Taxi B					
Taxi C					

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**Unit 1 Unit Assessment** *continued***Form B**

- 8** Look at the number in the place-value chart.

Ten Thousands	Thousands	Hundreds	Tens	Ones
2	1	0	5	4

**Part A**

Write the number in standard form, expanded form, and word form.

Standard form: \_\_\_\_\_

Expanded form: \_\_\_\_\_

Word form: \_\_\_\_\_

**Part B**

Andre used 210 hundreds, 5 tens, and 4 ones to make the number shown in the place-value chart. What are two other ways to make the number using only hundreds, tens, and ones?

\_\_\_\_\_

\_\_\_\_\_

- 9** A song was downloaded 2,653 times in one week. The next week the song was downloaded 5,729 times. How many times was the song downloaded altogether during the two weeks?

**Show your work.**

\_\_\_\_\_



**Unit 1 Unit Assessment** *continued***Form B**

- 10** A small community collected 18,412 pounds of recyclables during the year. This was 6,565 more pounds of recyclables than it collected last year. How many pounds of recyclables did the community collect last year?

**Show your work.**

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- 11** Look at the number 715,238.

**Part A**

What is the value of the digit 5? Explain how you know.

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**Part B**

What would be the value of the digit 5 if it were in

the hundred thousands place? \_\_\_\_\_

the ten thousands place? \_\_\_\_\_

the hundreds place? \_\_\_\_\_

the tens place? \_\_\_\_\_

the ones place? \_\_\_\_\_



**Unit 1 Unit Assessment** *continued***Form B**

- 12** Researchers counted 17,542 birds at a wildlife preserve. They also counted 12,385 land animals and 8,873 water animals.

**Part A**

To the nearest thousand, about how many more birds than land animals were counted? Explain.

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**Part B**

To the nearest hundred, about how many land animals and water animals were counted in all? Explain.

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**Part C**

Tomas rounded the number of water animals to the nearest thousand. Monique rounded the number of water animals to the nearest hundred. Josh said that the rounded numbers from Tomas and Monique were the same. Is Josh correct? Explain.

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**Ready® Mathematics****Unit 2 Unit Assessment****Form B****Solve the problems.**

- 1** Romulo worked at the county fair on 5 summer weekends. He worked 6 hours on Saturdays and 3 hours on Sundays.

**Part A**

How many hours did Romulo work in all at the county fair?

**Part B**

Explain how you know your answer is reasonable.

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- 2** Choose *Yes* or *No* to tell whether the pattern follows the rule "Subtract 3."

- a. 23, 20, 17, 14       Yes     No
- b. 31, 34, 37, 40       Yes     No
- c. 45, 42, 39, 36       Yes     No
- d. 14, 11, 9, 8         Yes     No





**Unit 2 Unit Assessment** *continued***Form B**

- 3** Clarissa says that the number 49 has three factors: 1, 7, and 49. Is Clarissa correct? Explain.

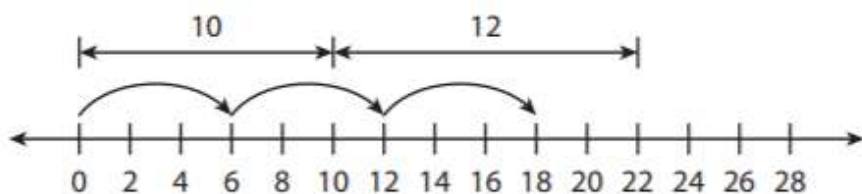
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- 4** Which problems can be represented by the number line below? Circle all that apply.



- A** Carmen earned \$10 babysitting one week and \$12 the next week. She spent \$6 on a gift for her brother. How much money did Carmen have left?
- B** A club plans a rafting trip. There are 10 boys and 12 girls in the club. Each raft can hold up to 6 people. How many rafts are needed? Will all the rafts be full?
- C** Laura and Ryan put books in boxes. Each box can hold 6 books. Laura has 10 books. Ryan has 12 books. How many boxes can Laura and Ryan fill? Will there be books left over?
- D** Museum tickets cost \$10 for students and \$12 for adults. Students and adults plan to visit the museum in groups of 6. How much does it cost for each group of students to visit the museum? for each group of adults?
- E** Tables and chairs are being set up for a meeting. Each table will have 6 chairs. There are 10 wooden chairs and 12 folding chairs. How many tables can be set up? Will there be any extra chairs?



**Unit 2 Unit Assessment** *continued***Form B**

- 5** Pamela bought 5 packs of markers for \$4 each and a sketchbook for \$8. She paid with three \$10 bills. Which equations could be used to find how much change Pamela received? Let  $C$  stand for the total cost and  $G$  stand for the change.

**A**  $C = (5 \times 4) + 8; G = C - (3 \times 10)$

**B**  $C = (4 + 8) \times 5; G = (3 \times 10) - C$

**C**  $C = (5 \times 4) + 8; G = (3 \times 10) - C$

**D**  $C = (5 + 4) \times 8; G = C - (3 \times 10)$

- 6** Answer the following shape pattern problems.

**Part A**

Draw a shape pattern that follows the rule that shapes go back and forth between three sides and zero sides.

**Show your work.**

**Part B**

What are two other rules that describe your set of shapes?

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**Unit 2 Unit Assessment** *continued***Form B**

- 7** Tell whether each sentence is *True* or *False* about the numbers 2, 8, and 48.

- a. All the numbers are factors of 48.  True  False
- b. All the numbers are multiples of 8.  True  False
- c. All the numbers are composite.  True  False
- d. Adding 2 to any of the numbers will make a composite number.  True  False
- e. Adding 1 to any of the numbers will make a prime number.  True  False

- 8** The rule for the number pattern shown below is “multiply by 2.”

6, 12, 24, 48, 96

What is another way to describe the numbers in the pattern?

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- 9** Pablo biked 7 miles last weekend. He biked 4 times as many miles this weekend. How many miles did Pablo bike altogether over the two weekends? Write and solve an equation to find the answer.

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**Unit 2 Unit Assessment** *continued***Form B**

**10** A number is 9 times as much as 3. Which equation represents the comparison?

**A**  $6 = 9 - 3$

**C**  $27 = 9 \times 3$

**B**  $12 = 9 + 3$

**D**  $3 = 9 \div 3$

**11** Eliza is creating a music playlist. She wants to listen to the entire playlist during her daily 50-minute walk. She has included 32 minutes of songs on the playlist so far. Write and solve an equation to find how many more 3-minute songs Eliza can include on her playlist.

**Show your work.**

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**12** Marcus practices guitar for 3 hours every day. Which could be the number of hours that Marcus has practiced after some number of days? Circle the letter for all that apply.

**A** 15**B** 17**C** 21**D** 27**E** 32

**Unit 2 Unit Assessment** *continued***Form B**

- 13** Vans bring fourth- and fifth-grade students on a field trip.  
There are 34 fourth-grade students and 28 fifth-grade students.

**Part A**

Each van can carry 9 students. How many vans are needed to carry all the students?

**Show your work.**

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**Part B**

How many vans will carry 9 students each?  
How many students will the remaining van carry?

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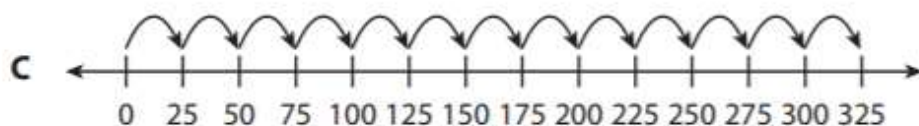


**Ready® Mathematics****Unit 3 Unit Assessment****Form B****Solve the problems.**

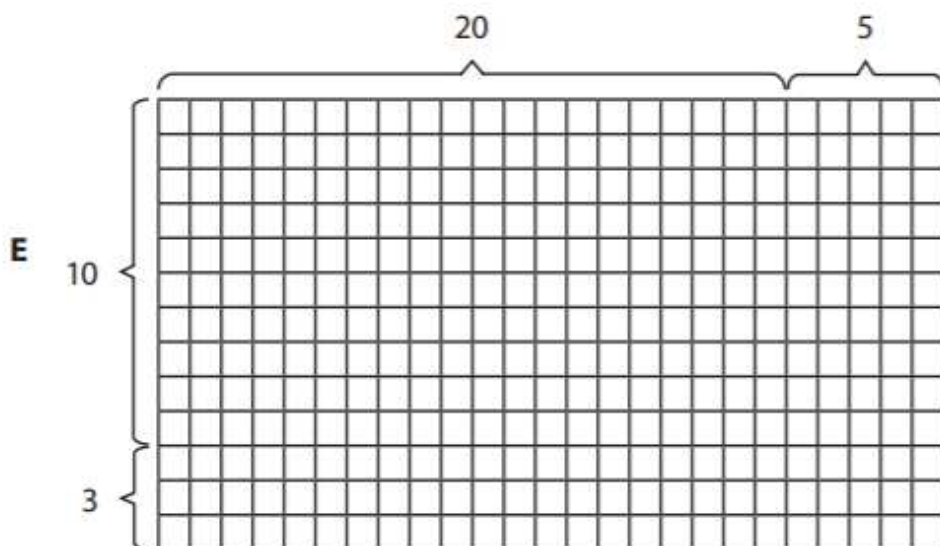
- 1** Which model(s) could represent the solution to the problem  $25 \times 13$ ?  
Circle the letter for all that apply.

**A**  $(2 \times 1) + (2 \times 3) + (5 \times 1) + (5 \times 3)$

**B**  $(25 \times 10) + (25 \times 3)$



**D**  $(20 \times 10) + (20 \times 3) + (5 \times 10) + (5 \times 3)$



- 2** Tell whether each equation is *True* or *False*.

**a.**  $731 \div 4 = 182 \text{ R}3$        True     False

**b.**  $484 \div 6 = 86$        True     False

**c.**  $5,614 \div 7 = 82$        True     False

**d.**  $6,921 \div 3 = 2,307$        True     False

**e.**  $1,683 \div 8 = 21 \text{ R}3$        True     False



**Unit 3 Unit Assessment** *continued***Form B**

- 3** An apple orchard has 4 sections of different kinds of apple trees. Each section has 217 trees. How many trees are there in all?

**Show your work.**

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- 4** Alex multiplied 2,957 by 3 and got the incorrect product 6,441. Find the correct product and explain what Alex did wrong.

**Show your work.**

Alex's Work

$$\begin{array}{r} 2,957 \\ \times \quad 3 \\ \hline 21 \\ 150 \\ 270 \\ \hline 6000 \\ 6,441 \end{array}$$

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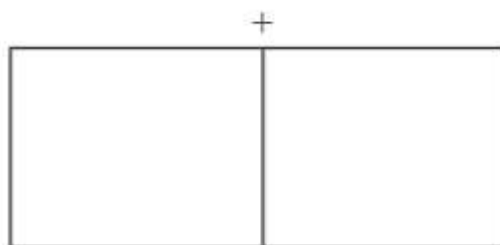




**Unit 3 Unit Assessment** *continued***Form B**

- 5** A group of musicians earned \$680 at a concert. The money was divided equally among the 8 musicians. How much did each musician earn? Use an area model to solve the problem.

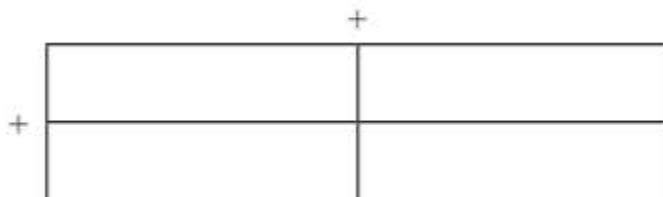
**Show your work.**



- 6** What is the product of  $2,419 \times 5$ ?

- A** 12,095
- B** 10,250
- C** 2,095
- D** 1,295

- 7** Show how to multiply  $54 \times 43$ . Complete the area model and equation.



$$54 \times 43 = \underline{\quad\quad} + \underline{\quad\quad} + \underline{\quad\quad} + \underline{\quad\quad} = \underline{\quad\quad}$$



**Unit 3 Unit Assessment** *continued***Form B**

- 8** A farm distributor packed 3,350 pumpkins in crates. Each crate can hold 8 pumpkins. All the crates are full except for one crate.

**Part A**

How many full crates of pumpkins are there?

**Show your work.**

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**Part B**

How many pumpkins are in the crate that is not full? Explain how you know.

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**Part C**

How many crates are used to pack all 3,350 pumpkins? Explain.

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**Ready® Mathematics****Unit 4 Unit Assessment****Form B****Solve the problems.****1** Tell whether each comparison is *True* or *False*.

a.  $\frac{1}{3} < \frac{1}{5}$        True    False

b.  $\frac{5}{6} > \frac{3}{6}$        True    False

c.  $0.7 < 0.75$        True    False

d.  $\frac{1}{2} = \frac{5}{10}$        True    False

**2** Lenny had  $\frac{7}{8}$  cup of milk. He used  $\frac{5}{8}$  cup to make a cake and  $\frac{2}{8}$  cup to make cupcakes. How much milk did he have left after making both?**Show your work.****3** Draw a model to show  $\frac{2}{3}$ . Then show 6 equal parts and write the equivalent fraction.

$$\frac{2}{3} = \underline{\hspace{2cm}}$$



**Unit 4 Unit Assessment** *continued***Form B**

- 4** Alex is going to make 5 pizzas. He plans to use  $\frac{5}{8}$  pound of cheese for each pizza. The number of pounds of cheese Alex needs falls between which two whole numbers?

- A** 0 and 1
- B** 1 and 2
- C** 2 and 3
- D** 3 and 4

- 5** Tanya's hair grew 3.08 centimeters since her last haircut. Kassie's hair grew 3.24 centimeters since her last haircut. Whose hair grew less since her last haircut? Explain.

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- 6** What is  $\frac{57}{100}$  written as a decimal?



**Unit 4 Unit Assessment** *continued***Form B**

- 7** Roger's desk is  $\frac{47}{100}$  of a meter longer than Amy's desk. Amy's desk is  $\frac{4}{10}$  of a meter longer than Piper's desk. How much longer is Roger's desk than Piper's desk?

**Show your work.**

- 8** Is each fraction and decimal pair equivalent? Circle all that are equivalent.

**A**  $\frac{3}{100}$  and 0.3

**B**  $\frac{7}{10}$  and 0.7

**C**  $\frac{42}{100}$  and 4.2

**D**  $\frac{29}{100}$  and 0.29

**E**  $\frac{0.2}{10}$  and 0.20

- 9** Write one number in each space to make each statement true.

**a.** 3 tenths + 41 hundredths = \_\_\_\_\_ hundredths

**b.** 59 hundredths = 2 tenths + \_\_\_\_\_ hundredths

**c.** 48 hundredths = \_\_\_\_\_ tenths + 18 hundredths



**Unit 4 Unit Assessment** *continued***Form B**

- 10** Caleb feeds his puppy  $\frac{5}{8}$  cup of food at each meal.

**Part A**

How many  $\frac{1}{8}$  cups does he feed his puppy at each meal?

**Part B**

Caleb feeds his puppy 2 meals a day. Write a multiplication equation to find how many cups of food Caleb feeds his puppy each day.

**Part C**

Caleb has 3 cups of food. Is this enough for him to feed his puppy for 4 days? Use a drawing or words to explain how you know.



**Unit 4 Unit Assessment** *continued***Form B**

- 11** Dahlia spent  $3\frac{1}{6}$  hours reading a book. She spent  $4\frac{5}{6}$  hours knitting a scarf.

**Part A**

How much longer did she spend knitting than reading?

**Show your work.**

**Part B**

How many hours did Dahlia spend reading and knitting in all?

**Show your work.**

- 12** Use a number line and an area model to show  $\frac{3}{10} + \frac{6}{10}$ .





Unit 4 Unit Assessment *continued*

## Form B

- 13** Monique takes violin lessons that last  $\frac{3}{5}$  of an hour. She had 6 lessons last month. What is the total number of hours Monique spent at her violin lessons last month?

**Show your work.**

- 14** Which of the following decimals is greater than 0.6 and less than 0.85?  
Circle all that apply.

**A** 0.07

**B** 0.65

**C** 0.72

**D** 0.8

**E** 0.91

- 15** Is  $5 \times \frac{3}{6}$  the same as  $15 \times \frac{1}{6}$ ? Explain.

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Add within 10,000.

Form B

$$\begin{array}{r} \mathbf{1} \quad 1,247 \\ + \quad 532 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{2} \quad 3,415 \\ + \quad 243 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{3} \quad 1,068 \\ + 1,510 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{4} \quad 4,037 \\ + 5,062 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{5} \quad 2,653 \\ + \quad 412 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{6} \quad 1,087 \\ + \quad 637 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{7} \quad 1,960 \\ + 3,204 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{8} \quad 6,723 \\ + 1,238 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{9} \quad 4,058 \\ + \quad 852 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{10} \quad 2,718 \\ + \quad 534 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{11} \quad 3,605 \\ + 2,795 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{12} \quad 2,806 \\ + 6,294 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{13} \quad 6,725 \\ + \quad 385 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{14} \quad 5,218 \\ + \quad 938 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{15} \quad 7,538 \\ + 2,462 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{16} \quad 3,999 \\ + 4,006 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{17} \quad 7,092 \\ + 1,865 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{18} \quad 8,444 \\ + \quad 565 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{19} \quad 5,146 \\ + 3,175 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{20} \quad 8,470 \\ + 1,525 \\ \hline \end{array}$$



Add within 100,000.

Form B

$$\begin{array}{r} \mathbf{1} \quad 10,943 \\ + 2,035 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{2} \quad 17,342 \\ + 1,340 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{3} \quad 12,453 \\ + 20,143 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{4} \quad 61,238 \\ + 24,501 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{5} \quad 34,210 \\ + 1,399 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{6} \quad 72,643 \\ + 8,142 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{7} \quad 15,920 \\ + 63,254 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{8} \quad 45,806 \\ + 54,159 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{9} \quad 94,627 \\ + 987 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{10} \quad 68,254 \\ + 2,438 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{11} \quad 26,513 \\ + 25,974 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{12} \quad 21,942 \\ + 38,657 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{13} \quad 23,658 \\ + 8,467 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{14} \quad 47,652 \\ + 27,836 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{15} \quad 29,999 \\ + 3,999 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{16} \quad 84,316 \\ + 15,684 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{17} \quad 74,895 \\ + 16,395 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{18} \quad 57,918 \\ + 25,896 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{19} \quad 42,968 \\ + 20,947 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{20} \quad 45,163 \\ + 27,989 \\ \hline \end{array}$$



## Subtract within 10,000.

Form B

$$\begin{array}{r} \mathbf{1} \quad 5,647 \\ - 3,210 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{2} \quad 2,748 \\ - 312 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{3} \quad 5,429 \\ - 4,003 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{4} \quad 6,918 \\ - 4,105 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{5} \quad 8,263 \\ - 1,453 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{6} \quad 1,397 \\ - 1,239 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{7} \quad 4,131 \\ - 2,051 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{8} \quad 7,382 \\ - 2,581 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{9} \quad 2,732 \\ - 1,108 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{10} \quad 4,803 \\ - 615 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{11} \quad 8,652 \\ - 3,481 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{12} \quad 3,607 \\ - 2,801 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{13} \quad 8,275 \\ - 2,391 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{14} \quad 3,120 \\ - 1,052 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{15} \quad 9,253 \\ - 198 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{16} \quad 6,732 \\ - 5,587 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{17} \quad 4,366 \\ - 1,568 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{18} \quad 1,812 \\ - 945 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{19} \quad 7,493 \\ - 2,594 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{20} \quad 7,423 \\ - 2,846 \\ \hline \end{array}$$

## Subtract within 100,000.

Form B

$$\begin{array}{r} \mathbf{1} \quad 53,641 \\ - 1,320 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{2} \quad 85,472 \\ - 82,302 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{3} \quad 93,245 \\ - 32,025 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{4} \quad 43,619 \\ - 20,301 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{5} \quad 30,582 \\ - 156 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{6} \quad 12,987 \\ - 2,793 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{7} \quad 82,056 \\ - 50,330 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{8} \quad 73,542 \\ - 25,402 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{9} \quad 27,810 \\ - 15,675 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{10} \quad 94,321 \\ - 4,255 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{11} \quad 65,852 \\ - 23,890 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{12} \quad 18,376 \\ - 8,953 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{13} \quad 15,008 \\ - 2,409 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{14} \quad 20,530 \\ - 19,790 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{15} \quad 99,325 \\ - 38,547 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{16} \quad 50,364 \\ - 37,148 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{17} \quad 36,825 \\ - 28,967 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{18} \quad 38,972 \\ - 19,999 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{19} \quad 45,000 \\ - 37,955 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{20} \quad 100,000 \\ - 23,871 \\ \hline \end{array}$$

**Add fractions.**

**Form B**

**1**  $\frac{1}{3} + \frac{1}{3} =$  \_\_\_\_\_

**2**  $\frac{1}{5} + \frac{2}{5} =$  \_\_\_\_\_

**3**  $\frac{1}{2} + \frac{1}{2} =$  \_\_\_\_\_

**4**  $\frac{3}{10} + \frac{2}{10} =$  \_\_\_\_\_

**5**  $\frac{2}{12} + \frac{5}{12} =$  \_\_\_\_\_

**6**  $\frac{2}{4} + \frac{1}{4} =$  \_\_\_\_\_

**7**  $\frac{3}{6} + \frac{2}{6} =$  \_\_\_\_\_

**8**  $\frac{2}{100} + \frac{8}{100} =$  \_\_\_\_\_

**9**  $\frac{60}{100} + \frac{30}{100} =$  \_\_\_\_\_

**10**  $\frac{9}{10} + \frac{3}{10} =$  \_\_\_\_\_

**11**  $\frac{3}{5} + \frac{4}{5} =$  \_\_\_\_\_

**12**  $\frac{5}{2} + \frac{1}{2} =$  \_\_\_\_\_

**13**  $\frac{3}{8} + \frac{2}{8} =$  \_\_\_\_\_

**14**  $\frac{4}{3} + \frac{1}{3} =$  \_\_\_\_\_

**15**  $\frac{30}{100} + \frac{300}{100} =$  \_\_\_\_\_

**16**  $\frac{4}{12} + \frac{5}{12} =$  \_\_\_\_\_

**17**  $\frac{7}{10} + \frac{2}{10} =$  \_\_\_\_\_

**18**  $\frac{2}{5} + \frac{3}{5} =$  \_\_\_\_\_

**19**  $\frac{3}{2} + \frac{4}{2} =$  \_\_\_\_\_

**20**  $\frac{5}{4} + \frac{2}{4} =$  \_\_\_\_\_

**21**  $\frac{3}{10} + \frac{5}{10} + \frac{1}{10} =$  \_\_\_\_\_

**22**  $\frac{1}{4} + \frac{2}{4} + \frac{3}{4} =$  \_\_\_\_\_

**23**  $\frac{2}{8} + \frac{1}{8} + \frac{4}{8} =$  \_\_\_\_\_

**24**  $\frac{2}{12} + \frac{3}{12} + \frac{5}{12} =$  \_\_\_\_\_

**25**  $\frac{1}{2} + \frac{1}{2} + \frac{1}{2} =$  \_\_\_\_\_

**26**  $\frac{9}{10} + \frac{3}{10} + \frac{1}{10} =$  \_\_\_\_\_

**27**  $\frac{4}{5} + \frac{3}{5} + \frac{2}{5} =$  \_\_\_\_\_



## Add mixed numbers.

**Form B**

**1**  $2\frac{1}{4} + 3\frac{1}{4} =$  \_\_\_\_\_

**2**  $3\frac{4}{6} + 4\frac{1}{6} =$  \_\_\_\_\_

**3**  $2\frac{1}{3} + 6\frac{2}{3} =$  \_\_\_\_\_

**4**  $1\frac{4}{5} + 2\frac{3}{5} =$  \_\_\_\_\_

**5**  $5\frac{3}{8} + 7\frac{2}{8} =$  \_\_\_\_\_

**6**  $2\frac{3}{12} + 3\frac{9}{12} =$  \_\_\_\_\_

**7**  $6\frac{9}{10} + 3\frac{2}{10} =$  \_\_\_\_\_

**8**  $4\frac{2}{3} + 1\frac{2}{3} =$  \_\_\_\_\_

**9**  $4\frac{3}{8} + 5\frac{4}{8} =$  \_\_\_\_\_

**10**  $2\frac{5}{6} + 8\frac{4}{6} =$  \_\_\_\_\_

**11**  $1\frac{3}{12} + 6\frac{5}{12} =$  \_\_\_\_\_

**12**  $15\frac{80}{100} + 4\frac{20}{100} =$  \_\_\_\_\_

**13**  $5\frac{3}{4} + 6\frac{2}{4} =$  \_\_\_\_\_

**14**  $3\frac{1}{8} + 7\frac{4}{8} =$  \_\_\_\_\_

**15**  $8\frac{1}{5} + 7\frac{2}{5} =$  \_\_\_\_\_

**16**  $3\frac{2}{3} + 3\frac{2}{3} =$  \_\_\_\_\_

**17**  $3\frac{4}{5} + 5\frac{2}{5} =$  \_\_\_\_\_

**18**  $2\frac{5}{6} + 9\frac{3}{6} =$  \_\_\_\_\_

**19**  $7\frac{8}{10} + 5\frac{9}{10} =$  \_\_\_\_\_

**20**  $20\frac{1}{2} + 10\frac{1}{2} =$  \_\_\_\_\_

**21**  $7\frac{3}{12} + 2\frac{11}{12} =$  \_\_\_\_\_

**22**  $3\frac{7}{8} + 4\frac{5}{8} =$  \_\_\_\_\_

**23**  $\frac{32}{100} + 3\frac{55}{100} =$  \_\_\_\_\_

**24**  $3\frac{5}{6} + 8\frac{3}{6} =$  \_\_\_\_\_





# Fraction Subtraction—Skills Practice

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

Subtract fractions.

Form B

1  $\frac{3}{3} - \frac{1}{3} =$  \_\_\_\_\_

2  $\frac{5}{5} - \frac{2}{5} =$  \_\_\_\_\_

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

4  $\frac{6}{10} - \frac{2}{10} =$  \_\_\_\_\_

5  $\frac{11}{12} - \frac{5}{12} =$  \_\_\_\_\_

6  $\frac{5}{4} - \frac{1}{4} =$  \_\_\_\_\_

7  $\frac{7}{6} - \frac{3}{6} =$  \_\_\_\_\_

8  $\frac{12}{100} - \frac{8}{100} =$  \_\_\_\_\_

9  $\frac{60}{100} - \frac{30}{100} =$  \_\_\_\_\_

10  $\frac{12}{10} - \frac{3}{10} =$  \_\_\_\_\_

11  $\frac{13}{5} - \frac{4}{5} =$  \_\_\_\_\_

12  $\frac{6}{2} - \frac{1}{2} =$  \_\_\_\_\_

13  $\frac{7}{8} - \frac{1}{8} =$  \_\_\_\_\_

14  $\frac{5}{3} - \frac{1}{3} =$  \_\_\_\_\_

15  $\frac{56}{100} - \frac{6}{100} =$  \_\_\_\_\_

16  $\frac{15}{12} - \frac{3}{12} =$  \_\_\_\_\_

17  $\frac{7}{10} - \frac{2}{10} =$  \_\_\_\_\_

18  $\frac{7}{5} - \frac{3}{5} =$  \_\_\_\_\_

19  $\frac{4}{2} - \frac{3}{2} =$  \_\_\_\_\_

20  $\frac{7}{4} - \frac{2}{4} =$  \_\_\_\_\_

21  $\frac{30}{10} - \frac{5}{10} =$  \_\_\_\_\_

22  $\frac{10}{4} - \frac{2}{4} =$  \_\_\_\_\_

23  $\frac{7}{8} - \frac{4}{8} =$  \_\_\_\_\_

24  $\frac{12}{12} - \frac{3}{12} =$  \_\_\_\_\_

25  $\frac{7}{2} - \frac{5}{2} =$  \_\_\_\_\_

26  $\frac{9}{10} - \frac{3}{10} =$  \_\_\_\_\_

27  $\frac{8}{5} - \frac{1}{5} =$  \_\_\_\_\_

# Fraction Subtraction—Skills Practice

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

Subtract mixed numbers.

Form B

1  $3\frac{2}{5} - \frac{1}{5} =$  \_\_\_\_\_

2  $6\frac{3}{4} - 1\frac{1}{4} =$  \_\_\_\_\_

3  $7\frac{1}{2} - \frac{1}{2} =$  \_\_\_\_\_

4  $4\frac{6}{10} - 1\frac{2}{10} =$  \_\_\_\_\_

5  $5\frac{2}{3} - 2\frac{1}{3} =$  \_\_\_\_\_

6  $4\frac{5}{6} - 3\frac{1}{6} =$  \_\_\_\_\_

7  $9\frac{20}{100} - 5\frac{2}{100} =$  \_\_\_\_\_

8  $8\frac{7}{10} - 3\frac{1}{10} =$  \_\_\_\_\_

9  $10\frac{4}{5} - 3\frac{1}{5} =$  \_\_\_\_\_

10  $1\frac{1}{8} - \frac{3}{8} =$  \_\_\_\_\_

11  $4\frac{1}{3} - \frac{3}{3} =$  \_\_\_\_\_

12  $8\frac{60}{100} - 2\frac{10}{100} =$  \_\_\_\_\_

13  $6\frac{5}{10} - 1\frac{9}{10} =$  \_\_\_\_\_

14  $8\frac{2}{5} - 5\frac{4}{5} =$  \_\_\_\_\_

15  $7\frac{1}{2} - 4\frac{1}{2} =$  \_\_\_\_\_

16  $5\frac{7}{10} - 3\frac{9}{10} =$  \_\_\_\_\_

17  $1\frac{3}{4} - \frac{2}{4} =$  \_\_\_\_\_

18  $16\frac{2}{8} - 12\frac{5}{8} =$  \_\_\_\_\_

19  $5\frac{3}{12} - 2\frac{7}{12} =$  \_\_\_\_\_

20  $7\frac{2}{10} - 2\frac{7}{10} =$  \_\_\_\_\_

21  $9\frac{1}{5} - 8\frac{4}{5} =$  \_\_\_\_\_

22  $3\frac{1}{4} - \frac{3}{4} =$  \_\_\_\_\_

23  $9\frac{70}{100} - 4\frac{10}{100} =$  \_\_\_\_\_

24  $14\frac{1}{3} - 9\frac{2}{3} =$  \_\_\_\_\_

Multiply a 2-digit number by a 1-digit number.

Form B

$$\begin{array}{r} \mathbf{1} \quad 21 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{2} \quad 10 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{3} \quad 41 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{4} \quad 32 \\ \times 1 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{5} \quad 22 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{6} \quad 11 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{7} \quad 54 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{8} \quad 64 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{9} \quad 55 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{10} \quad 75 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{11} \quad 12 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{12} \quad 84 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{13} \quad 57 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{14} \quad 96 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{15} \quad 41 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{16} \quad 82 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{17} \quad 26 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{18} \quad 92 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{19} \quad 81 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{20} \quad 35 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{21} \quad 62 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{22} \quad 43 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{23} \quad 98 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{24} \quad 36 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{25} \quad 28 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{26} \quad 53 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{27} \quad 38 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{28} \quad 24 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{29} \quad 48 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{30} \quad 99 \\ \times 9 \\ \hline \end{array}$$



# Multi-Digit Multiplication

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

**Multiply 2-digit numbers.**

**Form B**

**1**    12  
  × 53  
     

**2**    86  
  × 11  
     

**3**    55  
  × 43  
     

**4**    23  
  × 15  
     

**5**    12  
  × 83  
     

**6**    11  
  × 66  
     

**7**    94  
  × 25  
     

**8**    46  
  × 53  
     

**9**    37  
  × 62  
     

**10**   78  
  × 18  
     

**11**   24  
  × 96  
     

**12**   14  
  × 85  
     

**13**   74  
  × 36  
     

**14**   97  
  × 40  
     

**15**   41  
  × 56  
     

**16**   92  
  × 57  
     

**17**   63  
  × 45  
     

**18**   52  
  × 27  
     

**19**   84  
  × 29  
     

**20**   99  
  × 34  
     

**21**   50  
  × 26  
     

**22**   74  
  × 30  
     

**23**   89  
  × 40  
     

**24**   36  
  × 29  
     

**25**   98  
  × 90  
     



Multiply a 3-digit number by a 1-digit number.

Form B

$$\begin{array}{r} \mathbf{1} \quad 100 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{2} \quad 421 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{3} \quad 324 \\ \times 1 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{4} \quad 202 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{5} \quad 504 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{6} \quad 614 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{7} \quad 945 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{8} \quad 157 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{9} \quad 624 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{10} \quad 457 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{11} \quad 967 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{12} \quad 804 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{13} \quad 250 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{14} \quad 512 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{15} \quad 381 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{16} \quad 336 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{17} \quad 843 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{18} \quad 938 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{19} \quad 362 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{20} \quad 278 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{21} \quad 308 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{22} \quad 724 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{23} \quad 548 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{24} \quad 909 \\ \times 9 \\ \hline \end{array}$$



# Multi-Digit Multiplication—Skills Practice

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

Multiply a 4-digit number by a 1-digit number.

Form B

$$\begin{array}{r} \mathbf{1} \quad 4,130 \\ \times \quad 2 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{2} \quad 5,212 \\ \times \quad 4 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{3} \quad 3,023 \\ \times \quad 3 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{4} \quad 1,200 \\ \times \quad 4 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{5} \quad 5,170 \\ \times \quad 5 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{6} \quad 6,047 \\ \times \quad 8 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{7} \quad 2,593 \\ \times \quad 6 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{8} \quad 8,350 \\ \times \quad 7 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{9} \quad 3,084 \\ \times \quad 9 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{10} \quad 2,708 \\ \times \quad 6 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{11} \quad 8,925 \\ \times \quad 2 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{12} \quad 7,599 \\ \times \quad 3 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{13} \quad 9,423 \\ \times \quad 4 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{14} \quad 2,048 \\ \times \quad 5 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{15} \quad 4,625 \\ \times \quad 7 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{16} \quad 5,304 \\ \times \quad 8 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{17} \quad 2,730 \\ \times \quad 3 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{18} \quad 9,067 \\ \times \quad 2 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{19} \quad 7,199 \\ \times \quad 4 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{20} \quad 5,402 \\ \times \quad 7 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{21} \quad 6,521 \\ \times \quad 8 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{22} \quad 3,207 \\ \times \quad 9 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{23} \quad 8,022 \\ \times \quad 6 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{24} \quad 4,635 \\ \times \quad 5 \\ \hline \end{array}$$



# Multi-Digit Division—Skills Practice

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

Divide 2-digit dividends.

Form B

1  $2\overline{)54}$

2  $3\overline{)50}$

3  $4\overline{)34}$

4  $5\overline{)55}$

5  $6\overline{)77}$

6  $7\overline{)91}$

7  $8\overline{)97}$

8  $9\overline{)95}$

9  $2\overline{)89}$

10  $3\overline{)94}$

11  $4\overline{)83}$

12  $5\overline{)78}$

13  $6\overline{)90}$

14  $7\overline{)50}$

15  $8\overline{)80}$

16  $9\overline{)87}$

17  $2\overline{)38}$

18  $3\overline{)94}$

19  $4\overline{)99}$

20  $5\overline{)94}$



Divide 3-digit dividends.

Form B

1  $3\overline{)741}$

2  $4\overline{)508}$

3  $5\overline{)354}$

4  $2\overline{)705}$

5  $7\overline{)936}$

6  $6\overline{)648}$

7  $5\overline{)820}$

8  $7\overline{)149}$

9  $8\overline{)916}$

10  $3\overline{)960}$

11  $2\overline{)613}$

12  $4\overline{)887}$

13  $6\overline{)738}$

14  $5\overline{)432}$

15  $3\overline{)722}$



Divide 4-digit dividends.

Form B

1  $3 \overline{)4,392}$

2  $4 \overline{)3,492}$

3  $5 \overline{)4,206}$

4  $2 \overline{)9,570}$

5  $7 \overline{)2,958}$

6  $6 \overline{)5,241}$

7  $5 \overline{)8,065}$

8  $3 \overline{)4,639}$

9  $8 \overline{)1,854}$

10  $3 \overline{)5,740}$

11  $2 \overline{)7,356}$

12  $4 \overline{)3,820}$

13  $6 \overline{)4,523}$

14  $5 \overline{)6,148}$

15  $3 \overline{)2,005}$

## Add and Subtract Whole Numbers

### What You Need

- Recording Sheet and Game Board



### Check Understanding

Subtract.  
 $84,218 - 34,059$

### What You Do

1. Take turns. Pick a problem on the **Recording Sheet**.
2. Explain how to solve the problem. Write the answer.
3. Your partner checks the answer.
4. If your answer is correct, find that number on the **Game Board** and mark it with your initials. If your answer is not correct, your turn ends.
5. The first player with three numbers marked in a row wins.

*I borrow and regroup when the digit I'm subtracting is greater than the digit I'm subtracting from.*



### Go Further!

Choose three numbers on the **Game Board** that are less than 100,000. On a separate sheet of paper, find the sum of the numbers. Exchange papers with your partner to check.



Add and Subtract Whole Numbers

$\begin{array}{r} 4,376 \\ + 1,337 \\ \hline \end{array}$	$\begin{array}{r} 21,728 \\ - 3,496 \\ \hline \end{array}$	$\begin{array}{r} 5,006 \\ - 2,237 \\ \hline \end{array}$
$\begin{array}{r} 3,558 \\ - 679 \\ \hline \end{array}$	$\begin{array}{r} 73,821 \\ + 3,455 \\ \hline \end{array}$	$\begin{array}{r} 35,685 \\ - 17,134 \\ \hline \end{array}$
$\begin{array}{r} 683,530 \\ - 290,614 \\ \hline \end{array}$	$\begin{array}{r} 6,523 \\ + 5,407 \\ \hline \end{array}$	$\begin{array}{r} 591,474 \\ + 110,266 \\ \hline \end{array}$

<b>701,740</b>	<b>392,916</b>	<b>77,276</b>
<b>18,232</b>	<b>11,930</b>	<b>5,713</b>
<b>2,769</b>	<b>18,551</b>	<b>2,879</b>

## Using Factors and Multiples



### Check Understanding

What are the first five multiples of 10?

### What You Need

- number cube
- 75 game markers of one color
- 75 game markers of a different color
- Game Board

### What You Do

1. Roll the number cube. Find the factor next to that toss in the table. If it has already been used, roll again.
2. Put a game marker on all the multiples of that factor on the **Game Board** that have not already been covered.
3. Continue until all the multiples of 2, 3, 4, 5, 6, and 7 are covered.
4. Look at the numbers on the **Game Board** that are not covered. Partners take turns telling whether each number is a prime number or a composite number.
5. The player with more markers on the **Game Board** wins.

Toss	Factor
1	2
2	3
3	4
4	5
5	6
6	7

### Go Further!

Play the game again! This time, if you roll a number and that multiple has already been covered on the **Game Board**, remove your partner's markers and replace them with your own.





**Using Factors and Multiples**

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

To find multiples of a number, I start with 0 and skip-count by that number.



## Dividing by One-Digit Numbers

### What You Need

- 6 game markers in one color
- 6 game markers in a different color
- Recording Sheet and Game Board



### Check Understanding

What is the quotient?

$$3,265 \div 4 = \underline{\hspace{2cm}}$$

### What You Do

1. Take turns. Pick a problem on the **Recording Sheet**.
2. Divide. Write the quotient including the remainder.
3. Your partner uses multiplication to check the answer.
4. If your answer is correct, cover the remainder on the **Game Board**. If it is incorrect, your turn ends.
5. Continue until all problems have been solved. The player with the greater number of markers on the **Game Board** wins.

*The remainder must be less than the divisor. If it's not, divide again.*



### Go Further!

Choose any problem on the **Recording Sheet** with the divisor 4, 6, or 8. Decide how to change the divisor to double the quotient. On a separate sheet of paper, write the new problem and the quotient. Exchange papers with your partner to check.





**Dividing by One-Digit Numbers**

$1,842 \div 5 =$ _____	$2,176 \div 6 =$ _____	$8,488 \div 3 =$ _____
$4,632 \div 9 =$ _____	$1,535 \div 8 =$ _____	$5,178 \div 7 =$ _____
$1,638 \div 2 =$ _____	$4,519 \div 4 =$ _____	$3,842 \div 9 =$ _____

<b>3</b>	<b>6</b>	<b>0</b>
<b>7</b>	<b>2</b>	<b>1</b>
<b>5</b>	<b>8</b>	<b>4</b>



## Find Equivalent Fractions

### What You Need

- number cube (1–6)
- 12 game markers in one color for Partner A
- 12 game markers in a different color for Partner B
- Game Board



**Check Understanding**  
What are two equivalent fractions for  $\frac{1}{2}$ ?

### What You Do

1. Take turns. Roll the number cube. Look at the table. Find the fraction next to that toss.
2. Cover that fraction with a game marker on the **Game Board**. If that fraction is already taken, your turn ends.
3. Then cover all the fractions on the **Game Board** that are equivalent to your fraction.
4. Repeat until all the fractions are covered. The player with the most markers on the **Game Board** wins.
5. Play again.

Toss	Fraction
1	$\frac{1}{2}$
2	$\frac{3}{4}$
3	$\frac{1}{3}$
4	$\frac{1}{4}$
5	$\frac{2}{3}$
6	Your turn ends.

### Go Further!

Roll the number cube. Ask your partner to name an equivalent fraction for that toss.



## Find Equivalent Fractions

$\frac{1}{4}$	$\frac{3}{4}$	$\frac{4}{12}$	$\frac{1}{3}$
$\frac{4}{6}$	$\frac{6}{8}$	$\frac{1}{2}$	$\frac{5}{10}$
$\frac{2}{8}$	$\frac{2}{3}$	$\frac{8}{12}$	$\frac{2}{4}$

I can start with any fraction and multiply or divide the numerator and denominator by the same number to get an equivalent fraction.

$$\frac{1 \times 5}{2 \times 5} = \frac{5}{10}$$



## Different Ways to Show Sums

### What You Need

- number cube
- 15 game markers in one color
- 15 game markers in a different color
- Game Board



### Check Understanding

Use twelfths to write three different addition expressions that equal  $\frac{5}{12}$ .

### What You Do

1. Take turns. Roll the number cube. Find the fraction sum next to that toss in the table.
2. Find one expression on the **Game Board** that has that sum. Your partner checks your expression.
3. If you are correct, place a game marker on that expression. If you are not correct or if there are no expressions with that sum, your turn ends.
4. Continue until all the expressions on the **Game Board** have been covered.
5. The player with the greater number of markers on the **Game Board** wins.

Toss	Sum
1	$\frac{9}{8}$
2	$\frac{5}{6}$
3	$\frac{3}{8}$
4	$\frac{4}{6}$
5	$\frac{8}{6}$
6	$\frac{7}{8}$

### Go Further!

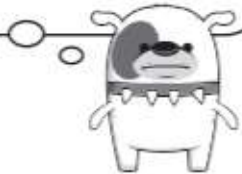
Write two addition expressions using sixths that equal  $\frac{8}{6}$  and are NOT on the **Game Board**. Exchange papers with your partner to check.



**Different Ways to Show Sums**

$\frac{1}{6} + \frac{1}{6} + \frac{1}{6} + \frac{5}{6}$	$\frac{1}{6} + \frac{1}{6} + \frac{1}{6} + \frac{1}{6} + \frac{1}{6}$	$\frac{2}{8} + \frac{3}{8} + \frac{4}{8}$	$\frac{2}{6} + \frac{1}{6} + \frac{1}{6}$	$\frac{1}{8} + \frac{1}{8} + \frac{1}{8}$
$\frac{4}{6} + \frac{2}{6} + \frac{1}{6} + \frac{1}{6}$	$\frac{4}{8} + \frac{3}{8}$	$\frac{2}{6} + \frac{3}{6}$	$\frac{4}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8}$	$\frac{2}{6} + \frac{1}{6} + \frac{1}{6} + \frac{1}{6}$
$\frac{2}{8} + \frac{2}{8} + \frac{3}{8}$	$\frac{3}{6} + \frac{1}{6} + \frac{1}{6}$	$\frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{3}{8}$	$\frac{3}{6} + \frac{5}{6}$	$\frac{1}{6} + \frac{2}{6} + \frac{1}{6}$
$\frac{3}{8} + \frac{3}{8} + \frac{3}{8}$	$\frac{2}{6} + \frac{2}{6} + \frac{1}{6}$	$\frac{1}{8} + \frac{2}{8}$	$\frac{2}{6} + \frac{2}{6}$	$\frac{1}{8} + \frac{2}{8} + \frac{1}{8} + \frac{2}{8} + \frac{1}{8}$
$\frac{1}{6} + \frac{2}{6} + \frac{1}{6} + \frac{1}{6}$	$\frac{4}{8} + \frac{3}{8} + \frac{1}{8} + \frac{1}{8}$	$\frac{2}{6} + \frac{2}{6} + \frac{4}{6}$	$\frac{1}{6} + \frac{1}{6} + \frac{1}{6} + \frac{1}{6}$	$\frac{2}{8} + \frac{1}{8}$

I can combine or break apart addends to find different expressions for a sum.





## Tenths to Hundredths

### What You Need

- 6 game markers in one color
- 6 game markers in a different color
- number cube
- Game Board



### Check Understanding

What hundredths fraction is equivalent to  $\frac{7}{10}$ ?

### What You Do

1. Take turns. Roll the number cube. Find the fraction next to that toss in the table. If you roll a 6, name any tenths fraction you like and find an equivalent hundredths fraction.
2. Mark one equivalent hundredths fraction on the **Game Board**. If there are no equivalent hundredths fractions for your fraction, your turn ends.
3. Your partner checks your work. If your answer is incorrect, remove your marker. Your turn ends.
4. The first player with three markers in a row wins.
5. Play again!

Toss	Fraction
1	$\frac{1}{10}$
2	$\frac{2}{10}$
3	$\frac{3}{10}$
4	$\frac{4}{10}$
5	$\frac{5}{10}$
6	Player's Choice

### Go Further!

Write four different pairs of fractions from the **Game Board**, that have a sum of  $\frac{100}{100}$  or 1.



Tenths to Hundredths

$\frac{40}{100}$	$\frac{30}{100}$	$\frac{60}{100}$
$\frac{90}{100}$	$\frac{10}{100}$	$\frac{20}{100}$
$\frac{80}{100}$	$\frac{60}{100}$	$\frac{10}{100}$
$\frac{20}{100}$	$\frac{50}{100}$	$\frac{70}{100}$

I use multiplication to find a hundredths fraction that is equivalent to a tenths fraction.





### Unit 1 Assessment Answer Key

1. B, D, E
2.  $9805 < 12053$  or  $12053 > 9805$ ; More vehicles passed the store on weekends.
3. a. no; b. yes; c. no; d. yes
4. a. false; b. true; c. true; d. false
5. Part A: 128,205; Part B: Raul is not correct.  $452,801 + 324,596 = 777,397$ . Possible explanation: Raul forgot to regroup 10 hundreds as 1 thousand.
6. D
7. Taxi A: 4 0 5 0 2  
Taxi B: 4 3 0 5 2  
Taxi C: 3 4 5 2 0  
Taxi C has gone the least number of miles.  
Possible explanation: Compare starting with the greatest place value. 3 ten thousands  $<$  4 ten thousands, so  $34,520 < 40,502$  and  $34,520 < 43,052$ .
8. Part A: 21,054;  $20,000 + 1,000 + 50 + 4$ ; twenty-one thousand fifty-four  
Part B: Possible answers – 2,105 tens, 4 ones; 210 hundreds, 54 ones
9. 8.382
10. 11,847
11. Part A: The digit 5 is in the ten thousands place so it has a value of 5 thousands or 5,000.  
Part B: 500,000; 50,000; 500; 50; 5
12. Part A: To the nearest thousand, 17,542 rounds up to 18,000. To the nearest thousand, 12,385 rounds down to 12,000.  $18,000 - 12,000 = 6,000$ . So, about 6,000 more birds than land animals were counted.  
Part B: To the nearest hundred, 12,385 rounds up to 12,400. To the nearest hundred, 8,873 rounds up to 8,900.  $12,400 + 8,900 = 21,300$ . So, about 21,300 land animals and water animals were counted in all.  
Part C: Josh is not correct. Rounding 8,873 to the nearest thousand results in 9,000. Rounding 8,873 to the nearest hundred results in 8,900 which is a different value than 9,000.

### Unit 2 Assessment Answer Key

1. Part A: check student work; Romulo worked 45 hours in all. Part B: Possible explanation:  $6 + 3$  is about 10.  $10 \times 5 = 50$ . 50 is close to 45.
2. a. yes; b. no; c. yes; d. no
3. Yes. Possible explanation – factor pairs of 49 are 1 and 49, and 7 and 7. So, 1, 7, and 49 are the three factors of 49.
4. B, C, E
5. C
6. Part A: possible answer – triangle, circle, triangle, circle, triangle, circle, ...  
Part B: possible answer-the shapes go back and forth between triangles and circles. The odd numbered spots in the pattern have shapes with an odd number of sides. The even numbered spots in the pattern have shapes with no sides.
7. a. true; b. false; c. false; d. true; e. false
8. possible answer-all the numbers in the pattern are even numbers.
9. Pablo biked 35 miles altogether over the two weekends.
10. C
11. Eliza can include 6 more 3-minute songs on her playlist.
12. A, C, D
13. Part A: 7 vans are needed; Part B: 6 vans will carry 9 students each. The remaining van will carry 8 students.

### Unit 3 Assessment Answer Key

1. B, C, D, E
2. a. true; b. false; c. false; d. true; e. false
3. There are 868 trees in all.
4. Alex correctly multiplied the ones, tens, and thousands values in 2957 by 3. He did not multiply the hundreds value in 2957 by 3. The correct product is 8,871.
5. Each musician earned \$85.
6. A
7. top left box:  $40 \times 50 = 2000$ ; top right box:  $40 \times 4 = 160$ ; bottom left box:  $3 \times 50 = 150$ ; bottom right box:  $3 \times 4 = 12$ . So,  $54 \times 43 = 2000 + 150 + 160 + 12 = 2322$ .
8. Part A: There are 418 full crates of pumpkins. Part B: The remainder is 6. This means that there are 6 pumpkins left over to pack in the crate that is not full. Part C: There are 418 crates with 8 pumpkins each and 1 crate with 6 pumpkins.  $418 + 1 = 419$ . So, 419 crates are used to pack all 3,350 pumpkins.

### Unit 4 Assessment Answer Key

1. a. false; b. true; c. true; d. true
2. total milk used:  $7/8$ ; milk left: 0 cups
3. check model to see if it shows 6 equal parts and 4 parts shaded:  $4/6$
4. D
5. Tanya's hair; possible explanation:  $3.08 < 3.24$  because the whole number parts are the same and 8 hundredths is less than 24 hundredths.
6. 0.57
7.  $47/100 + 40/100 = 87/100$
8. B, D
9. a. 71; b. 39; c. 3
10. Part A: 5; Part B:  $2 \times 5/8 = 10/8$ ; Part C: No Possible explanation – Caleb needs 5 cups of food for 4 days and  $5 > 3$ , so he does not have enough food.
11. Part A:  $1 \frac{4}{6}$  or  $1 \frac{2}{3}$ ; Part B: 8
- 12: check to see if model shows increments of tenths (0,  $1/10$ ,  $2/10$ ,  $3/10$ , ...) and the area model should be a box with 10 equal parts and 3 parts shaded in one color and 6 parts shaded another color.
13.  $3 \frac{3}{5}$  hours
14. B, C, D
15. Yes; possible explanation –  $3/6$  means 3 copies of  $1/6$ , so  $5 \times 3/6$  means  $5 \times 3$  or 15 copies of  $1/6$ .

### Activity 4.21 Answer Key

#### ★★ Check Understanding

50,159

#### Recording Sheet

Row 1: 5,713; 18,232; 2,769

Row 2: 2,879; 77,276; 18,551

Row 3: 392,916; 11,930; 701,740

### Activity 4.12 Answer Key

#### ★★ Check Understanding

10, 20, 30, 40, 50

#### Game Board

The numbers that should not be covered are:

2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31, 37, 41, 43, 47, 53, 59, 61, 67, 71, 73, 79, 83, 89, 97.

Sample answer: The numbers are prime numbers.

Activity 4.25 Answer Key

★★★ **Check Understanding**

816 R1

**Recording Sheet**

Row 1: 368 R2; 362 R4; 2,829 R1

Row 2: 514 R6; 191 R7; 739 R5

Row 3: 819; 1,129 R3; 426 R8

Activity 4.27 Answer Key

★★ **Check Understanding**

Any two:  $\frac{2}{4}, \frac{4}{8}, \frac{5}{10}, \frac{6}{12}$

**Game Board**

Toss 1:  $\frac{1}{2}, \frac{2}{4}, \frac{5}{10}$

Toss 2:  $\frac{6}{8}, \frac{3}{4}$

Toss 3:  $\frac{1}{3}, \frac{4}{12}$

Toss 4:  $\frac{2}{8}, \frac{1}{4}$

Toss 5:  $\frac{4}{6}, \frac{8}{12}, \frac{2}{3}$

Activity 4.31 Answer Key

★★ **Check Understanding**

Sample answer:  $\frac{2}{12} + \frac{3}{12}, \frac{2}{12} + \frac{1}{12} + \frac{2}{12}$

$$\frac{1}{12} + \frac{1}{12} + \frac{1}{12} + \frac{2}{12}$$

**Game Board**

Toss 1:  $\frac{2}{8} + \frac{3}{8} + \frac{4}{8}, \frac{3}{8} + \frac{3}{8} + \frac{3}{8}, \frac{4}{8} + \frac{3}{8} + \frac{1}{8} + \frac{1}{8}$

Toss 2:  $\frac{1}{6} + \frac{1}{6} + \frac{1}{6} + \frac{1}{6} + \frac{1}{6}, \frac{2}{6} + \frac{3}{6}, \frac{2}{6} + \frac{1}{6} + \frac{1}{6} + \frac{1}{6},$   
 $\frac{3}{6} + \frac{1}{6} + \frac{1}{6}, \frac{2}{6} + \frac{2}{6} + \frac{1}{6}, \frac{1}{6} + \frac{2}{6} + \frac{1}{6} + \frac{1}{6}$

Toss 3:  $\frac{1}{8} + \frac{1}{8} + \frac{1}{8}, \frac{1}{8} + \frac{2}{8}, \frac{2}{8} + \frac{1}{8}$

Toss 4:  $\frac{2}{6} + \frac{1}{6} + \frac{1}{6}, \frac{1}{6} + \frac{2}{6} + \frac{1}{6}, \frac{2}{6} + \frac{2}{6},$   
 $\frac{1}{6} + \frac{1}{6} + \frac{1}{6} + \frac{1}{6}$

Toss 5:  $\frac{1}{6} + \frac{1}{6} + \frac{1}{6} + \frac{5}{6}, \frac{4}{6} + \frac{2}{6} + \frac{1}{6} + \frac{1}{6}, \frac{3}{6} + \frac{5}{6},$   
 $\frac{2}{6} + \frac{2}{6} + \frac{4}{6}$

Toss 6:  $\frac{4}{8} + \frac{3}{8}, \frac{4}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8}, \frac{2}{8} + \frac{2}{8} + \frac{3}{8},$   
 $\frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{3}{8}, \frac{1}{8} + \frac{2}{8} + \frac{1}{8} + \frac{2}{8} + \frac{1}{8}$

Activity 4.35 Answer Key

★★ **Check Understanding**

$$\frac{70}{100}$$

**Game Board**

$$\frac{1}{10} = \frac{10}{100}, \frac{2}{10} = \frac{20}{100}, \frac{3}{10} = \frac{30}{100}$$

$$\frac{4}{10} = \frac{40}{100}, \frac{5}{10} = \frac{50}{100}, \frac{6}{10} = \frac{60}{100}$$

$$\frac{7}{10} = \frac{70}{100}, \frac{8}{10} = \frac{80}{100}, \frac{9}{10} = \frac{90}{100}$$