Name _____

Reteaching **51**

Lesson 51

• Multiplying by Two-Digit Numbers

- Use a four-step process to multiply by two-digit numbers.

Example:
$$\begin{array}{r} 25 \\ \times\ 11 \\ \hline \end{array}$$

1. Multiply the ones digits (ignore the tens digit):

$$\begin{array}{r} 25 \\ \times\ 11 \\ \hline 5 \end{array}$$

2. Multiply the tens digit in the top number by the ones digit in the bottom number. Add any number you carried from step 1.

$$\begin{array}{r} 25 \\ \times\ 11 \\ \hline 25 \end{array}$$

3. Indent the next line using zero as a placeholder. Then multiply by the tens digit in the bottom number.

$$\begin{array}{r} 25 \\ \times\ 11 \\ \hline 25 \\ +\ 250 \\ \hline \end{array}$$

4. Add the two rows.

$$\begin{array}{r} 25 \\ \times\ 11 \\ \hline 25 \\ +\ 250 \\ \hline 275 \end{array}$$

- Remember to write the dollar sign and decimal point in money problems.

Practice:

Multiply. Remember to write the dollar sign in money problems.

1.
$$\begin{array}{r} 52 \\ \times\ 14 \\ \hline \\ +\ \ \ 0 \\ \hline \end{array}$$

2.
$$\begin{array}{r} \$0.85 \\ \times\ \ \ 22 \\ \hline \\ +\ \ \ \ \ 0 \\ \hline \end{array}$$

3.
$$\begin{array}{r} 49 \\ \times\ 67 \\ \hline \\ +\ \ \ 0 \\ \hline \end{array}$$

4.
$$\begin{array}{r} 36 \\ \times\ 24 \\ \hline \end{array}$$

5.
$$\begin{array}{r} 25 \\ \times\ 17 \\ \hline \end{array}$$

6.
$$\begin{array}{r} \$0.72 \\ \times\ \ \ 12 \\ \hline \end{array}$$

Name _____

Reteaching 52

Lesson 52

• Naming Numbers through Hundred Billions

- When we name large numbers we use commas to separate billions, millions, thousands, and ones (units). We do not say "and" when naming whole numbers.

Example:

134,652,700,000 → 1 3 4 , 6 5 2 , 7 0 0 , 0 0 0

billions	millions	thousands	units

one hundred thirty-four billion,
six hundred fifty-two million,
seven hundred thousand

- Use the place-value chart below to help name the numbers.

Billions		Millions		Thousands		Units (ones)
hundred billions ten billions billions	billions comma	hundred millions ten millions millions	millions comma	hundred thousands ten thousands thousands	thousands comma	hundreds tens ones decimal point

---

Practice:

Name each number using words.

1. 128,056 _____

2. 30,763,000 _____

Use digits to write each number in problems 3–4.

3. seven billion, two hundred fifty million _____

4. six hundred eight thousand, nine hundred forty-five _____

5. In 789,432,177,000 which digit is in the ten billions place? _____

6. In which of the following numbers does the 6 have a value of sixty thousand?

A 23,698 **B** 216,783 **C** 468,907 **D** 648,125

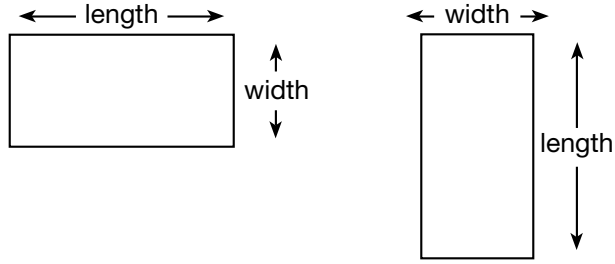
7. Write the value of the 3 in 987,654,321. _____

Name _____

- **Perimeter**
- **Measures of a Circle**

Perimeter

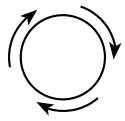
- **Length** is the longer side.
- **Width** is the shorter side.

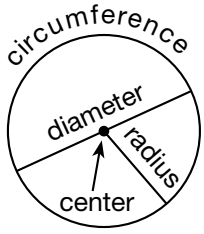


- **Perimeter** is the distance around a figure.

Measures of a Circle

- **Circumference** is the perimeter of a circle.





- The **diameter** of a circle is the distance across the whole circle through its center.

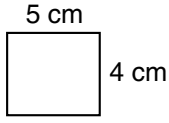
diameter $=$ 2 $\times$ radius $(d = 2r)$

- The radius of a circle is the distance from its center to its "edge."

radius $= \frac{1}{2}$ of diameter $(r = \frac{1}{2}d)$

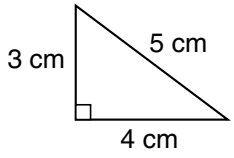
Practice:

Remember to write the units.



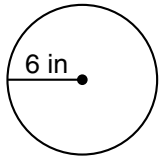
1. What is the length of the rectangle? _____

2. What is the width of the rectangle? _____



3. What is the perimeter of the rectangle? _____

4. What is the perimeter of the right triangle? _____



5. What is the diameter of the circle? _____

6. What is the perimeter of a circle called? _____

Name _____

Reteaching 54

Lesson 54

• Dividing by Multiples of 10

- Use long division with two-digit divisors.

  Divide, multiply, subtract, bring down.
  Use zero as a placeholder.
  Place a digit above each digit.
  Make sure any remainder is smaller than the divisor.

Example:

$$30\overline{)597} \quad 19 \text{ R } 27$$

$$\begin{array}{r} 30 \\ \hline 297 \\ 270 \\ \hline 27 \end{array}$$

Divide
Multiply
Subtract
Bring down

- To help divide by a two-digit number, mentally remove the last digit from each number.

Practice:

Divide. Remember to write the dollar sign in money problems.

1. $40\overline{)\$5.60}$

2. $20\overline{)283}$ R

3. $30\overline{)630}$

4. $50\overline{)\$7.50}$

5. $10\overline{)319}$ R

6. $60\overline{)254}$ R

7. Show how to check this division answer. Is the answer correct?

$$30\overline{)864} \quad 028 \text{ R } 24$$

Check: 28 × _____ = _____

_____ + _____ = _____

Is the quotient correct? _____

Name _____

• Multiplying by Three-Digit Numbers

- When multiplying by three-digit numbers:

  Indent using zeros as placeholders.
  Carry using mental math if five or less.
  Be sure to use commas in the answers.

Practice:

Find each product. Carry on your fingers.

1.
$$\begin{array}{r} 412 \\ \times\ 368 \\ \hline \\ \\ 0 \\ +\quad 00 \\ \hline \end{array}$$

2.
$$\begin{array}{r} 308 \\ \times\ 367 \\ \hline \\ \\ 0 \\ +\quad 00 \\ \hline \end{array}$$

3.
$$\begin{array}{r} 564 \\ \times\ 293 \\ \hline \\ \\ 0 \\ +\quad 00 \\ \hline \end{array}$$

4.
$$\begin{array}{r} 405 \\ \times\ 366 \\ \hline \\ \\ 0 \\ +\quad 00 \\ \hline \end{array}$$

5.
$$\begin{array}{r} 628 \\ \times\ 435 \\ \hline \\ \\ 0 \\ +\quad 00 \\ \hline \end{array}$$

6.
$$\begin{array}{r} 750 \\ \times\ 547 \\ \hline \\ \\ 0 \\ +\quad 00 \\ \hline \end{array}$$

Name _____

• Multiplying by Three-Digit Numbers That Include Zero

- Indent using zeros as placeholders.
- "Offset" when the number ends in zero.

$$\begin{array}{r} {\scriptstyle 1} \\ 324 \\ \times\ 140 \\ \hline 12960 \\ +\ 32400 \\ \hline 45360 \end{array}$$

- When the middle digit in the bottom number is zero, "bring down" the zero.

$$\begin{array}{r} {\scriptstyle 1} \\ 324 \\ \times\ 104 \\ \hline 1296 \\ +\ 32400 \\ \hline 32696 \end{array}$$

Practice:

Multiply. Remember to write the dollar sign in money problems.

1.
$$\begin{array}{r} 347 \\ \times\ 310 \\ \hline 0 \\ +\ 00 \\ \hline \end{array}$$

2.
$$\begin{array}{r} \$2.65 \\ \times\ 690 \\ \hline 0 \\ +\ 00 \\ \hline \end{array}$$

3.
$$\begin{array}{r} 250 \\ \times\ 160 \\ \hline 0 \\ +\ 00 \\ \hline \end{array}$$

4.
$$\begin{array}{r} 413 \\ \times\ 102 \\ \hline \\ +\ 00 \\ \hline \end{array}$$

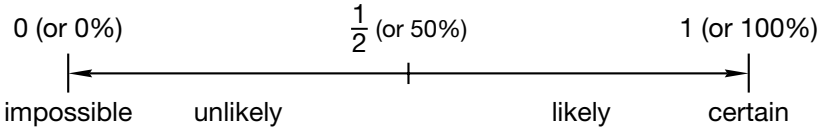
5.
$$\begin{array}{r} \$1.86 \\ \times\ 201 \\ \hline \\ +\ 00 \\ \hline \end{array}$$

6.
$$\begin{array}{r} 260 \\ \times\ 208 \\ \hline 0 \\ +\ 00 \\ \hline \end{array}$$

Name _____

• Probability

- **Probability** measures how likely it is for an event to happen. It is named with a number from 0 to 1.
- **Chance** measures the same thing but with a percent.
- If an event is certain to happen, its probability is 1. Its chance is 100%.
- If an event is impossible, its probability is 0. Its chance is 0%.
- All other events have probabilities between 0 and 1 or chances between 0% and 100%.



- Possible results of experiments that involve probability are called **outcomes**.

Practice:

1. What is the probability a tossed coin will land heads up? _____

2. What is the probability a number cube will stop on 3? _____

3. What is the probability a number cube will stop on a number less than 6?

_____

4. What is the probability a number cube will stop on a number greater than 6?

_____

5. If a game has a 32% chance of winning, is it more likely that you will win or not win?

_____

6. If there is an 80% chance of rain, then what is the chance that it will not rain? Remember to write the percent symbol.

_____

Name _____

Reteaching **58**

Lesson 58

• Writing Quotients with Mixed Numbers

• In division problems, sometimes we write the remainder as a fraction.

$$3\overline{)17}\ \text{R2} \rightarrow 3\overline{)17}$$

Practice:

Write each quotient as a mixed number. Show the remainder as a fraction.

1. $5\overline{)13}$ **2.** $29 \div 4$) **3.** $\frac{17}{4}$)

4. $5\overline{)47}$ **5.** $24 \div 5$) **4.** $\frac{49}{8}$)

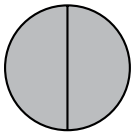
7. $7\overline{)68}$ **8.** $49 \div 10$) **9.** $\frac{32}{5}$)

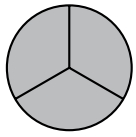
10. $6\overline{)47}$ **11.** $53 \div 4$) **12.** $\frac{51}{8}$)

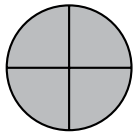
Name _____

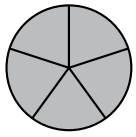
• Subtracting a Fraction from 1

- If the numerator (top) and denominator (bottom) are the same, the fraction equals 1.


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

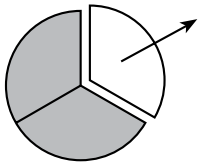

$\frac{3}{3} = 1$


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


$\frac{5}{5} = 1$

- When adding fractions and mixed numbers, remember to simplify any fraction names for 1 in the answer.
- To subtract a fraction from 1, rename the 1 as a fraction.

$$1 - \frac{1}{3}$$
$$\downarrow \quad \downarrow$$
$$\frac{3}{3} - \frac{1}{3} = \frac{2}{3}$$



- Look at the fraction that is being subtracted to decide which name for 1 to use.

Practice:

1. Write a fraction equal to 1 that has a denominator of 5. _____

Compare.

2. $\frac{3}{3}$ ◯ 1

3. $3\frac{3}{3}$ ◯ 4

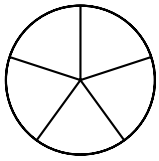
Add.

4. $\frac{4}{10} + \frac{6}{10} =$ _____

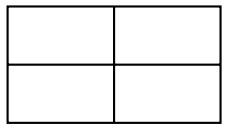
5. $\frac{3}{8} + \frac{5}{8} =$ _____

Subtract. (Rename the 1.)

6. $1 - \frac{1}{5} =$ _____



7. $1 - \frac{3}{4} =$ _____



8. How many fraction names for 1 are there? _____

A none **B** 15 **C** 340 **D** infinite

Name _____

Reteaching **60**

Lesson 60

• Finding a Fraction to Complete a Whole

- To find a fraction to complete a whole, first rename the 1 with a matching numerator and denominator before subtracting.

Example: Two fifths of the students are girls.

What fraction of the students are boys?

Solution: This picture shows that the students are $\frac{5}{5}$.

The girls are $\frac{2}{5}$ of the students.

$\frac{5}{5} - \frac{2}{5} = \frac{3}{5}$, so the boys must be $\frac{3}{5}$ of the students.

Practice:

1. Maggie completed three sevenths of her homework assignment. What fraction of her assignment is left to complete?

_____

2. Four tenths of the skateboarders were able to use a half-pipe without falling. What fraction of the skateboarders were unable to use a half-pipe?

_____

3. Two eighths of the championship football game tickets sold for under $30. One eighth of the tickets sold for more than $100. What fraction of the tickets sold for an amount between $30 and $100?

_____

4. Yancey ran a mile faster than seven ninths of his classmates. If Yancey ran a mile in 7 minutes 30 seconds, what fraction of his classmates ran the mile in 7 minutes 30 seconds or less?

_____

5. Marlena is learning how to take photographs. She has taken eleven twelfths of the pictures on the roll of film. What fraction of the pictures on the roll of film does she have left to take?

_____