Math Common Core
State Standards Review

2nd Grade
into 3rd Grade

the green school for global citizens

www.rogersinternationalschool.org

Grade 2 Common Core Overview

Operations and Algebraic Thinking

- Represent and solve problems involving addition and subtraction.
- Add and subtract within 20.
- Work with equal groups of objects to gain foundations for multiplication.

Number and Operations in Base Ten

- Understand place value.
- Use place value understanding and properties of operations to add and subtract.

Measurement and Data

- Measure and estimate lengths in standard units.
- Relate addition and subtraction to length.
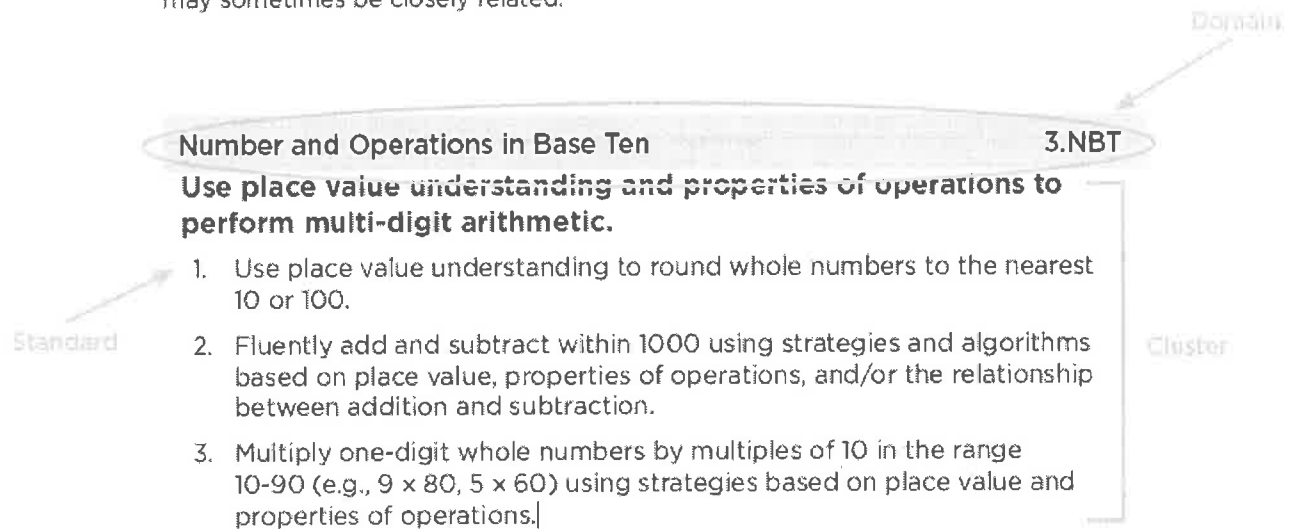- Work with time and money.
- Represent and interpret data.

Geometry

- Reason with shapes and their attributes.

How to read the grade level standards

Standards define what students should understand and be able to do.

Clusters are groups of related standards. Note that standards from different clusters may sometimes be closely related, because mathematics is a connected subject.

Domains are larger groups of related standards. Standards from different domains may sometimes be closely related.

Domain

Number and Operations in Base Ten   3.NBT

Use place value understanding and properties of operations to perform multi-digit arithmetic.

1. Use place value understanding to round whole numbers to the nearest 10 or 100.

2. Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.

3. Multiply one-digit whole numbers by multiples of 10 in the range 10-90 (e.g., 9 × 80, 5 × 60) using strategies based on place value and properties of operations.

Standard   **Cluster**

Mathematical Practices

1. Make sense of problems and persevere in solving them.

2. Reason abstractly and quantitatively.

3. Construct viable arguments and critique the reasoning of others.

4. Model with mathematics.

5. Use appropriate tools strategically.

6. Attend to precision.

7. Look for and make use of structure.

8. Look for and express regularity in repeated reasoning.

Grade 2: Operations & Algebraic Thinking

Represent and solve problems involving addition and subtraction.
CCSS.Math.Content.2.OA.A.1
Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.[1]

Add and subtract within 20.
CCSS.Math.Content.2.OA.B.2
Fluently add and subtract within 20 using mental strategies.[2] By end of Grade 2, know from memory all sums of two one-digit numbers.

Work with equal groups of objects to gain foundations for multiplication.
CCSS.Math.Content.2.OA.C.3
Determine whether a group of objects (up to 20) has an odd or even number of members, e.g., by pairing objects or counting them by 2s; write an equation to express an even number as a sum of two equal addends.

CCSS.Math.Content.2.OA.C.4
Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.

Number Stories: Change-to-More and Change-to-Less

For each number story, write ? in the change diagram for the number you want to find. Then write the numbers you know in the diagram. Next, write a number model. Finally, solve the problem and write the answer.

Example: Miguel starts the day with $31. He earns $27 dog walking. How much money does he have at the end of the day?
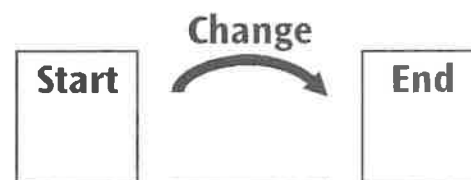
Start	Change	End
31	+27	?
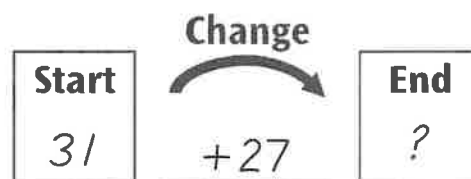
Number model: $\underline{31\ +\ 27\ =\ 58}$

Answer the question: _____$58_____

---

1. Leah has $63. She loans Henry $27. How much money does Leah have left?

Start	Change	End

Number model: _____

Answer the question: _____

---

2. George finds $27 in his pant pocket. Then he finds another $8 in his coat pocket. How much money does he find in all?

Start	Change	End
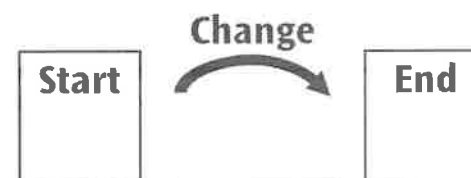
Number model: _____

Answer the question: _____

Solving Comparison Number Stories

For each number story:

- ◆ Write the numbers you know in the comparison diagram.
- ◆ Write ? for the number you want to find.
- ◆ Solve the problem.
- ◆ Write a number model.

Example:

Barb scored 27 points.
Cindy scored 10 points.

Barb scored _17_ (more points than)
Cindy.

Circle the words that tell you this is
a comparison problem.

Number model: _27 − 10 = 17_

Quantity
27

Quantity	
10	?
	Difference

---

1. Rover lives on the 18th floor.
Fido lives on the 9th floor.

Rover lives _____ floors higher than
Fido.

Circle the words that tell you this is
a comparison problem.

Number model: _____

Quantity

Quantity	
	Difference

---

2. Sam is 42 years old. Sue is 30 years old.

Sam is _____ years older than Sue.

Circle the words that tell you this is
a comparison problem.

Number model: _____

Quantity

Quantity	
	Difference

Solving Comparison Number Stories

1. Add.	2. Subtract.
a. 52 + 30 = _____	a. 59 – 40 = _____
b. 42 + 70 = _____	b. 78 – 60 = _____

3. Ayana ran 26 miles last week.
Jamal ran 34 miles last week.

Jamal ran _____ more miles than Ayana.

Circle the words that tell you this is a comparison problem.

Number model: _____

Quantity

Quantity

_____
Difference

4. Nick studied for 55 minutes.
Claire studied for 36 minutes.

Nick studied for _____ more minutes than Claire.

Circle the words that tell you this is a comparison problem.

Number model: _____

Quantity

Quantity

_____
Difference

5. Circle the problem(s) you might use a comparison diagram to solve.

a. Farid has 48 books. Zahara has 61 books.
   Zahara has _____ more books than Farid.

b. Start temperature: 14°F   End temperature: 34°F
   The temperature change was _____.

c. Fred had 32 stickers. Jen had 20 stickers.
   They had _____ stickers altogether.

Comparing Number Stories

Write a number model for each number story.

1. **a.** There were 13 fish in a pond. 12 fish were added to the pond. How many fish are in the pond now?

   Number model: _____

   b. There were 25 fish in a pond. 12 were caught and taken out of the pond. How many fish are still in the pond?

   Number model: _____

2. **a.** There were 22 paintings on a wall. 7 were taken off the wall to enter in an art contest. How many paintings are on the wall now?

   Number model: _____

   b. There were 15 paintings on a wall. 7 paintings were added to the wall. How many painting are on the wall now?

   Number model: _____

3. **a.** There were 30 ounces of juice in a container. An hour later, there were 12 ounces less. How many ounces of juice are in the container now?

   Number model: _____

   b. There were 18 ounces of juice in a container. 12 ounces were added to the container. How many ounces of juice are in the container now?

   Number model: _____

Addition and Subtraction Fact Families with Dominoes

For Problems 1 through 7, write 2 addition facts and
2 subtraction facts for each domino.

1.

$$\frac{2}{+\;4}{6} \quad \frac{4}{+\;2}{6} \quad \frac{6}{-\;2}{4} \quad \frac{6}{-\;4}{2}$$

2.

☐ + ☐ + ☐ - ☐ - ☐

3.

☐ + ☐ + ☐ - ☐ - ☐

4.

☐ + ☐ + ☐ - ☐ - ☐

5.

☐ + ☐ + ☐ - ☐ - ☐

6.

☐ + ☐ + ☐ - ☐ - ☐

7.

☐ + ☐ + ☐ - ☐ - ☐

8. Write one addition fact and
one subtraction fact.

☐ + ☐   ☐ - ☐

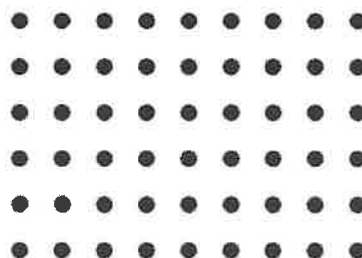**Name:** _____ **Date:** _____ **Time:** _____

Adding Equal Groups of Objects

---

1. Write the doubles fact.
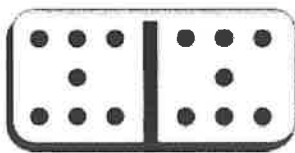
Number model:

_____ + _____ = _____

2. Use the dots to show a 4 × 6 array.

Write an addition number model.

_____

---

3. Show an array and complete an addition number model to match the diagram.

boxes	pencils per box	pencils in all
3	7	?

Addition number model: _____

---

4. Draw an array that has 5 rows and has 4 ◇ in each row.

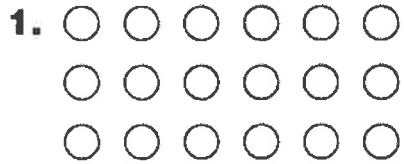Write an addition number model.

_____

5. Draw your own array.

How many rows? _____

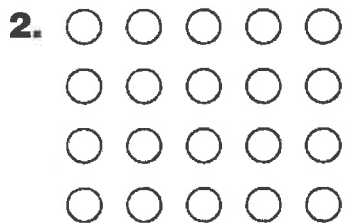How many objects per row? _____

How many objects in all? _____

Building Arrays

Write two addition number sentences that describe each array.

1. ○ ○ ○ ○ ○ ○
○ ○ ○ ○ ○ ○
○ ○ ○ ○ ○ ○

Number sentence: _____

Number sentence: _____

2. ○ ○ ○ ○ ○
○ ○ ○ ○ ○
○ ○ ○ ○ ○
○ ○ ○ ○ ○

Number sentence: _____

Number sentence: _____

Draw an array to show each number sentence.

3. $2 + 2 + 2 + 2 = 8$

Array:

4. $3 + 3 + 3 = 9$
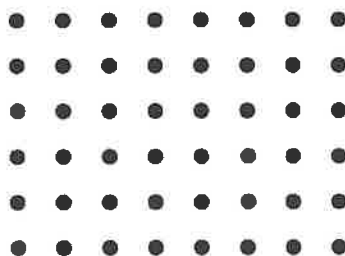
Array:

Building Arrays

1. Add.

   a. $54 + 30 + 8 =$ _____

   b. $60 + 70 + 90 =$ _____
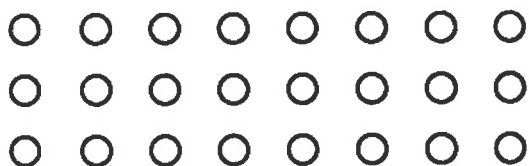
   c. $55 + 83 + 67 + 35 =$ _____

2. Circle the dots to show a 5-by-6 array.

Write an addition number model.

_____

3. Write two different addition number sentences that describe the array.

Number sentence: _____

Number sentence: _____

4. Draw an array to show the number sentence.

Array

   $5 + 5 + 5 = 15$

Grade 2: Number & Operations in Base Ten

Understand place value.
CCSS.Math.Content.2.NBT.A.1
Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases:

CCSS.Math.Content.2.NBT.A.1.a
100 can be thought of as a bundle of ten tens — called a "hundred."

CCSS.Math.Content.2.NBT.A.1.b
The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).

CCSS.Math.Content.2.NBT.A.2
Count within 1000; skip-count by 5s, 10s, and 100s.

CCSS.Math.Content.2.NBT.A.3
Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.

CCSS.Math.Content.2.NBT.A.4
Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using >, =, and < symbols to record the results of comparisons.

Use place value understanding and properties of operations to add and subtract.
CCSS.Math.Content.2.NBT.B.5
Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.

CCSS.Math.Content.2.NBT.B.6
Add up to four two-digit numbers using strategies based on place value and properties of operations.

CCSS.Math.Content.2.NBT.B.7
Add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.

CCSS.Math.Content.2.NBT.B.8
Mentally add 10 or 100 to a given number 100-900, and mentally subtract 10 or 100 from a given number 100-900.

CCSS.Math.Content.2.NBT.B.9
Explain why addition and subtraction strategies work, using place value and the properties of operations.[1]

Finding the Mystery Number

For Problems 3–6, read the clues. Use base-10 blocks to build the mystery number. Then use base-10 shorthand to show your work.

1. Draw base-10 blocks (| ■) to show 33.	**2.** Draw base-10 blocks (| ■) to show 56.
3. Clues: 11 ones and 7 tens. Mystery number: _____	**4.** Clues: 4 ones, 11 tens, 2 hundreds Mystery number: _____
5. Clues: 5 ones, 18 tens, 3 hundreds Mystery number: _____	**6.** Clues: 16 ones, 13 tens, 6 hundreds Mystery number: _____

Representing Numbers up to 10,000

1. Draw base-10 blocks (☐ | ▪) to represent 621.

2. In the number 3,845,

the 4 means _____.

the 5 means _____.

the 3 means _____.

the 8 means _____.

3. Write how many of each block you would use to represent 5,196.
Then write how much they are worth.

Big cube(s): _____ _____

Flat(s): _____ _____

Long(s): _____ _____

Cubes(s): _____ _____

4. Write how many of each block you would use to represent 8,703.
Then write how much they are worth.

Big cube(s): _____ _____

Flat(s): _____ _____

Long(s): _____ _____

Cubes(s): _____ _____

5. Write 5,196 in words.

_____

_____
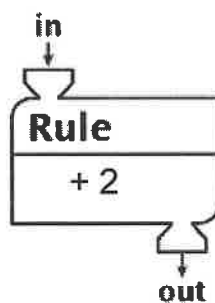
_____

6. Write 8,703 in words.

_____

_____

_____

Name: _____ Date: _____ Time: _____
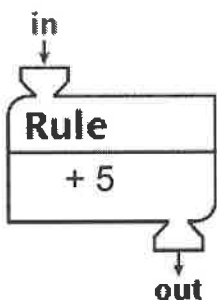
Using Function Machines

---

1. Count up by 10s.

40, _____, _____, _____,

_____, _____

---

2. Complete.

in

Rule

+ 2

out

in	out
696	
698	
700	
702	

---

3. Complete.

in

Rule

+ 5

out

in	out
780	
785	
790	
795	

---

4. Complete.

in

Rule

+ 10

out
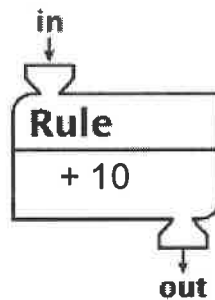
in	out
190	
200	
210	
220	

---

5. Complete.

in

Rule

+ 100

out
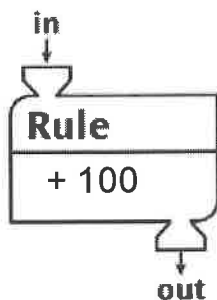
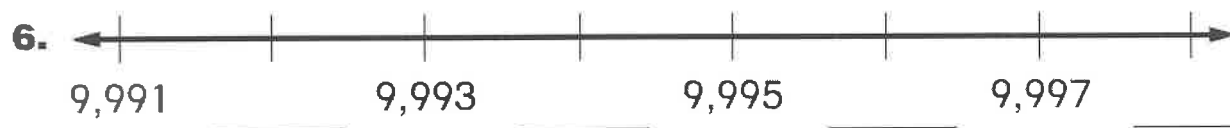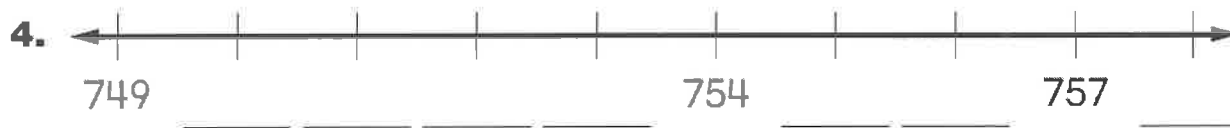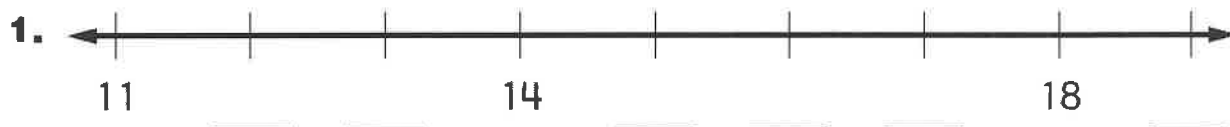| in	out
500	
600	
700	
800	

---

6. Make up and solve your own Function Machine question.

Writing Whole Numbers on Number Lines

Fill in the missing numbers.

1.

11 ___ ___ 14 ___ ___ ___ 18 ___

2.

73 ___ ___ ___ ___ 78 ___ ___ 81

3.

145 ___ ___ 148 ___ ___ 152 ___ ___

4.

749 ___ ___ ___ 754 ___ ___ 757 ___

5.

1,027 1,028 ___ ___ ___ 1,032 1,033 ___

6.

9,991 ___ 9,993 ___ 9,995 ___ 9,997 ___

Using the <, >, and = Symbols

$3 < 5$
3 is less than 5.

$5 > 3$
5 is greater than 3.

Write <, >, or =.

1. 412 _____ 334   **2.** 161 _____ 612   **3.** 797 _____ 777

4. 364 _____ 346   **5.** 589 _____ 589   **6.** 434 _____ 502

7. 187 _____ 200   **8.** 843 _____ 829   **9.** 964 _____ 964

10. 399 _____ 701   **11.** 739 _____ 681   **12.** 634 _____ 635

13. 256 _____ 256   **14.** 422 _____ 424   **15.** 931 _____ 932

Select Diagrams to Solve Number Stories

You may use a diagram to help you find the answer.

1. One fence is 6 meters long. Another fence is 9 meters long. What would be their combined length? _____ meters	**2.** It takes 6 minutes to walk to the store. It takes 17 minutes to walk to school. How many more minutes does it take to walk to school? _____ minutes
3. Kichi made 58 chocolate truffles last week. She made 20 chocolate truffles this week. How many chocolate truffles did Kichi make in all? Answer: _____ chocolate truffles Number model: _____	**4.** A barracuda can swim at a speed of 43 kilometers per hour. A swordfish can swim about 54 kilometers per hour faster. About how fast can a swordfish swim? Answer: _____ kilometers per hour Number Model: _____
5. Kyle read 19 minutes on Monday and 23 minutes on Tuesday. Nancy read 35 minutes on Wednesday. How many more minutes did Kyle read than Nancy? Answer: _____ minutes Number Model: _____ _____	**6.** Write and solve your own number story.

Use Money Notation

1. Write <, >, or =.

Ⓠ Ⓠ Ⓝ ☐ $0.50

2. Write <, >, or =.

Ⓠ Ⓓ Ⓝ ☐ $0.50

3. How much money?

$ _____

How do you read this amount? _____ dollars and _____ cents

4. How much money?

$20 $20 $10 $5

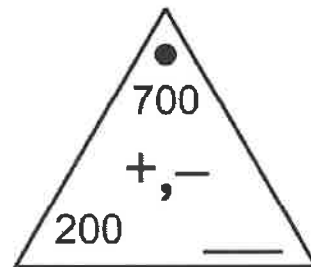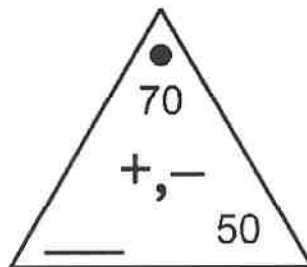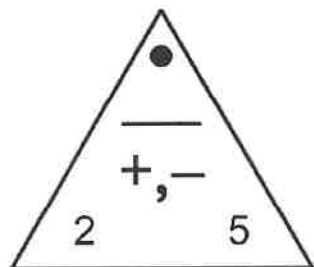Ⓠ Ⓓ Ⓝ Ⓝ Ⓝ Ⓝ

$ _____

How do you read this amount?

_____ dollars and

_____ cents

5. Explain how you found the total amount of money in Problem 5.

Name: _____   Date: _____   Time: _____

Fact Extension Patterns Using Fact Triangles

1. Complete the Fact Triangles. Then write the fact families.

△ ___ +,− 2   5

△ 70 +,− ___ 50

△ 700 +,− 200 ___

___ + ___ = ___   ___ + ___ = ___   ___ + ___ = ___

___ + ___ = ___   ___ + ___ = ___   ___ + ___ = ___

___ − ___ = ___   ___ − ___ = ___   ___ − ___ = ___

___ − ___ = ___   ___ − ___ = ___   ___ − ___ = ___

2. Complete the Fact Triangles. Then write the fact families.

△ 11 +,− 4   ___

△ ___ +,− 40   70

△ 1,100 +,− ___   700

___ + ___ = ___   ___ + ___ = ___   ___ + ___ = ___

___ + ___ = ___   ___ + ___ = ___   ___ + ___ = ___

___ − ___ = ___   ___ − ___ = ___   ___ − ___ = ___

___ − ___ = ___   ___ − ___ = ___   ___ − ___ = ___

S3

Counting Back by 10s and 100s

1. Count up by 10s.

283, _____, _____, _____,

_____, _____

2. Count up by 100s.

296, _____, _____, _____,

_____, _____

3. Complete.

Rule
Count back by 10s

526 → ☐ → ☐ → ☐ → ☐
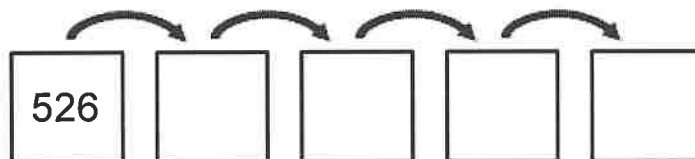
4. Complete.

Rule
Count back by 10s

781 → ☐ → ☐ → ☐ → ☐
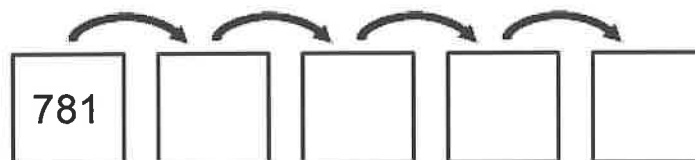
5. Complete.

Rule
Count back by 100s

835 → ☐ → ☐ → ☐ → ☐
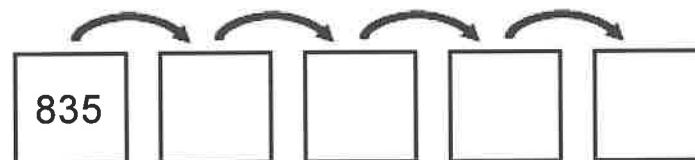
Grade 2: Measurement & Data

Measure and estimate lengths in standard units.
CCSS.Math.Content.2.MD.A.1
Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.

CCSS.Math.Content.2.MD.A.2
Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen.

CCSS.Math.Content.2.MD.A.3
Estimate lengths using units of inches, feet, centimeters, and meters.

CCSS.Math.Content.2.MD.A.4
Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.

Relate addition and subtraction to length.
CCSS.Math.Content.2.MD.B.5
Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem.

CCSS.Math.Content.2.MD.B.6
Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2, ..., and represent whole-number sums and differences within 100 on a number line diagram.

Work with time and money.
CCSS.Math.Content.2.MD.C.7
Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.

CCSS.Math.Content.2.MD.C.8
Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using $ and ¢ symbols appropriately. Example: If you have 2 dimes and 3 pennies, how many cents do you have?

Represent and interpret data.
CCSS.Math.Content.2.MD.D.9
Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units.

CCSS.Math.Content.2.MD.D.10
Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems[1] using information presented in a bar graph.

Measuring in Fractions of a Unit

Measure each line segment to the nearest $\frac{1}{2}$ inch. Write the measurement in the blank to the right.

1. _____   _____ inches

2. _____   _____ inches

Measure each line segment to the nearest $\frac{1}{2}$ centimeter. Write the measurement in the blank to the right.

3. _____   _____ centimeters

4. _____   _____ centimeters

Measure each line segment to the nearest $\frac{1}{4}$ inch. Write the measurement in the blank to the right.

5. _____   _____ inches

6. _____   _____ inches

Estimating in Inches, Feet, and Yards

1. Measure your shoe to the nearest centimeter.
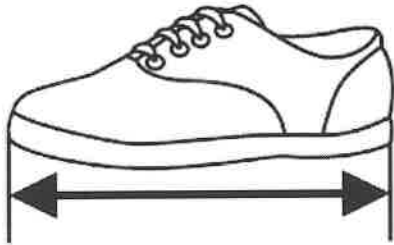
   It measures about _____ cm.

2. Measure the line segment.

   _____

   It is about _____ inches long.

   3

   5

   11

   $11\frac{1}{2}$

3. The length of my smile is closest to

   _____.

   2 inches

   2 feet

   2 yards

   2 meters

4. The distance between my elbow and my hand is closest to _____.

   1 inch

   1 centimeter

   1 foot

   1 yard

5. The height of my desk is closest to

   _____.

   1 inch

   1 centimeter

   1 foot

   1 yard

6. Describe how you solved Problem 5.

Comparing Lengths in Centimeters

Work with a partner. Measure your height, head size, and shoe length to the nearest centimeter. For each measurement, choose a tool to use. You may use a ruler, meterstick, or tape measure.

1. Height

I am about _____ centimeters tall.

My partner is about _____ centimeters tall.

Who is taller? _____

How much taller? _____ cm

2. Head size (the distance around your head)

My head is about _____ centimeters around.

My partner's head size is about _____ centimeters around.

Who has the larger head size? _____

How much larger? _____ cm

3. Shoe length

My shoe is about _____ centimeters long.

My partner's shoe is about _____ centimeters long.

Who has the longer shoe length? _____

How much longer? _____ cm

Growth Number Stories

1. On Monday, the bamboo plant was 31 inches tall. On Tuesday, it was 39 inches tall. How many inches did it grow from Monday to Tuesday?

   Answer: _____ in.

   Number model:

   _____

2. The Eastern cottonwood is one of the fastest growing trees in the United States. If it is 69 feet tall at the beginning of the year and is 82 feet tall at the end of the year, how many feet did it grow in a year?

   Answer: _____ ft

   Number model:

   _____

3. The cactus was 9 centimeters tall in October of last year and was 12 centimeters tall in October of this year. How many centimeters did the cactus grow in a year?

   Answer: _____ cm

   Number model:

   _____

Placing Numbers on a Number Line

Draw a mark on each number line to show where each number belongs.
Write the number below the mark.

---

1. Show 15.

```
|←——+————————————————+————————————————+—→
    0                10               20
```

---

2. Show 30.

Show 35.

```
|←——+————————————————+————————————————+—→
    0                20               40
```

---

3. Explain how you figured out where to draw the marks in Problem 2.

Telling Time at 5-Minute Intervals

0

5

35
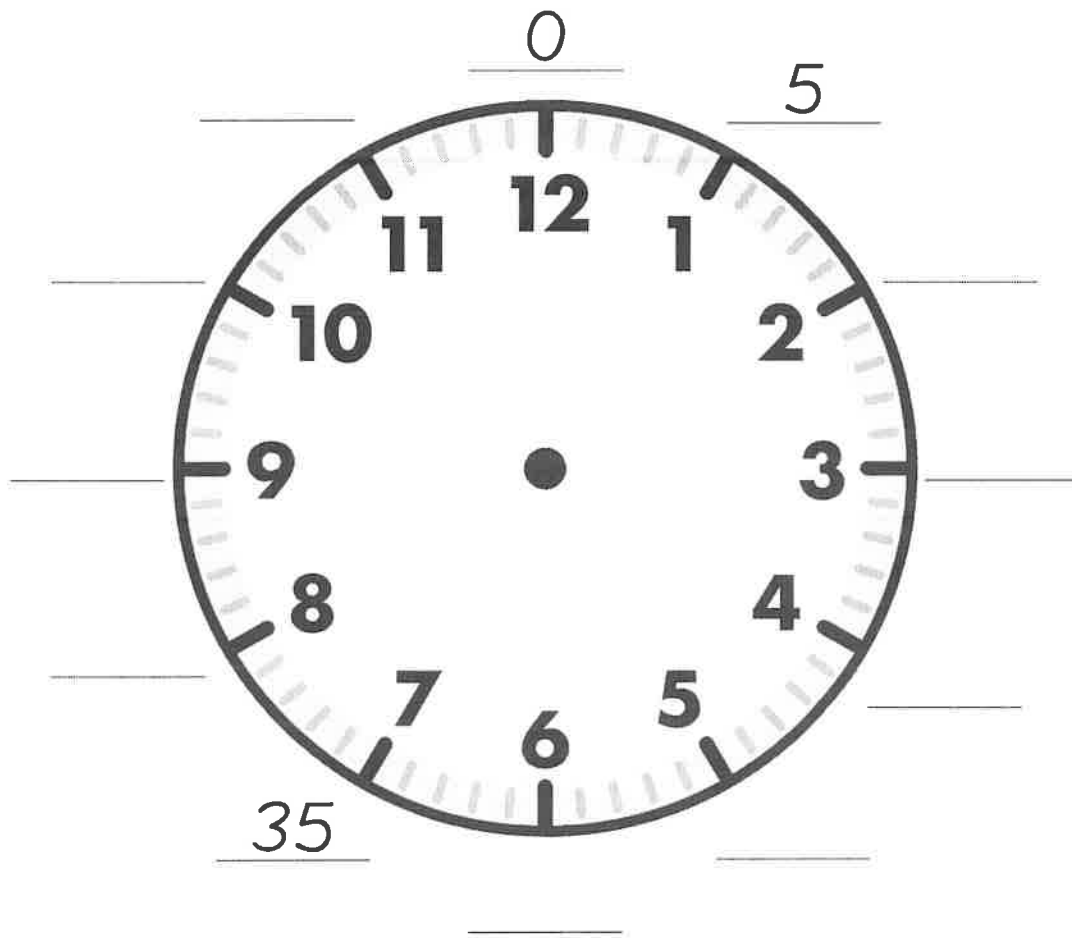
Telling Time at 5-Minute Intervals

1. Draw the hour hand and the minute hand.
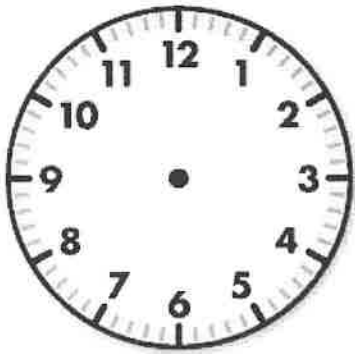
half-past 5 o'clock

2. Write the correct time.

_____ : _____

3. Write the correct time.

_____ : _____

4. Write the correct time.

_____ : _____

5. Write the correct time.

_____ : _____

6. Write the correct time.

_____ : _____

Writing and Showing Times to the Five Minutes

Write the time shown on each clock.

1.

2.

3.

$12 : 35$

___ : ___

___ : ___

4.

5.

6.

___ : ___

___ : ___

___ : ___

Draw the hour and minute hands to match the time.

7.

4:55

8.
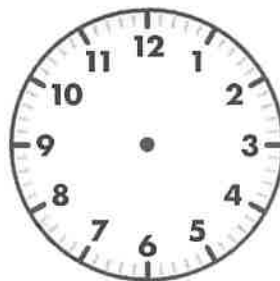
7:25

9.
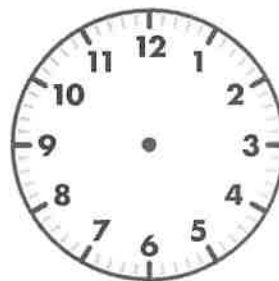
8:05

10.

1:50

11.

6:20

12.
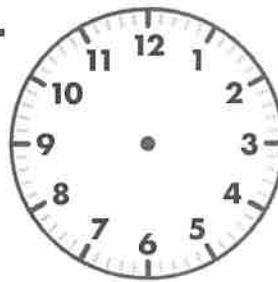
10:40

Exchanging Coins

For each statement below, write the number or word for your answer and record your answer by drawing Ⓟ for penny, Ⓝ for nickel, and Ⓓ for dime .

1. I can exchange 1 nickel for _____ pennies.

2. I can exchange 1 dime for _____ pennies.

3. I can exchange 1 dime for _____ nickels.

4. I can exchange 1 quarter for _____ nickels.

5. I can exchange 1 quarter for _____ dimes and _____ nickel.

Try This

6. Make up your own problem.
I can exchange _____ for _____.

Ways to Make a Dollar

1. How much money? _____¢ Ⓓ Ⓓ Ⓝ Ⓝ Ⓝ Ⓟ Ⓟ	**2.** Use Ⓠ, Ⓓ, Ⓝ, and Ⓟ. Show $2.00 using 8 coins.
3. Use Ⓠ, Ⓓ, Ⓝ, and Ⓟ. Show $1.00 using 10 coins.	**4.** Use Ⓠ, Ⓓ, Ⓝ, and Ⓟ. Show $2.00 using 11 coins.

Buy Items without Exact Change

1. How much money? Ⓓ Ⓝ Ⓟ Ⓟ _____¢	2. How much money? Ⓠ Ⓠ Ⓠ Ⓓ Ⓟ Ⓟ _____¢ or $_____
3. A toy costs 67¢. I pay 3 Ⓠ. How much change will I get? _____¢	4. Yutaka bought a pencil for 32¢. He paid Ⓠ Ⓓ. How much change did he get? _____¢
5. The total cost is 95¢. You pay with a $1 bill. How much change do you get? _____	6. Explain how you found the answer in Problem 5.

Making Bar Graphs from Tally Charts

1. Use the tally chart to complete the bar graph.

Number of Books	Number of Students
0	卌 //
1	卌
2	//
3	卌 /
4	///
5	///

Books Purchased

Number of Students (y-axis: 0–7)
Number of Books (x-axis: 0 1 2 3 4 5)
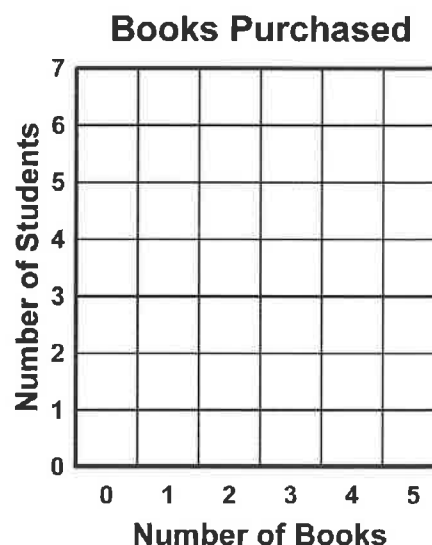
2. Use the tally chart to complete the bar graph.

Teams	Number of Games Played
A	卌 ////
B	卌 //
C	卌 ///
D	卌 卌

Total Games Played

Number of Games Played (y-axis: 0–10)
Teams (x-axis: A B C D)
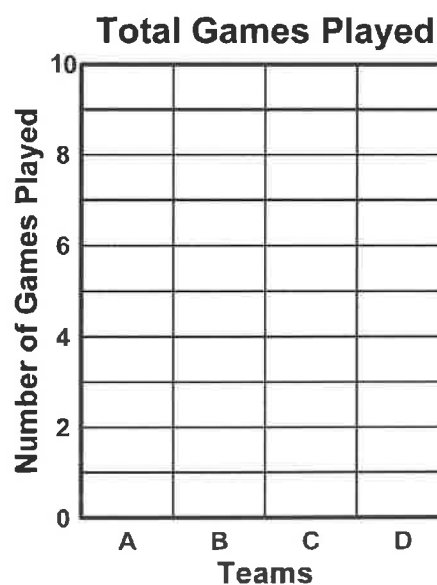
Matching Bar Graphs to Tally Charts

1. Jackson had 6 pennies. He lost 3 pennies. How many pennies does Jackson have now? _____ pennies	**2.** There are 8 dogs in the park. 2 dogs go home. How many dogs are left? _____ dogs

3. The data in the tally chart and the bar graph do not match. Change the bar graph so that it matches the data in the tally chart.

Number of Goals	Number of Students
0	///
1	ЖТ /
2	ЖТ
3	////
4	//
5	ЖТ //

Goals Scored

4. Use the data from Problem 3 to answer the questions.

a. How many total students made at least one goal? _____

b. What was the most common number of goals made? _____

c. Did every student make a goal? _____

Grade 2: Geometry

Reason with shapes and their attributes.

CCSS.Math.Content.2.G.A.1

Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces.¹ Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.

CCSS.Math.Content.2.G.A.2

Partition a rectangle into rows and columns of same-size squares and count to find the total number of them.

CCSS.Math.Content.2.G.A.3

Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words halves, thirds, half of, a third of, etc., and describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape.

Name: _____   **Date:** _____   **Time:** _____

Comparing Quadrilaterals

1. Place an X on the rectangle.
Circle the triangle.
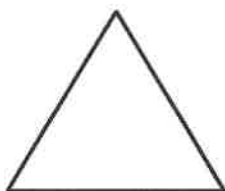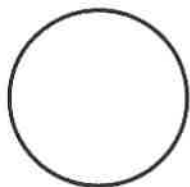
2. Draw two quadrilaterals that have 2 opposite sides that are parallel.
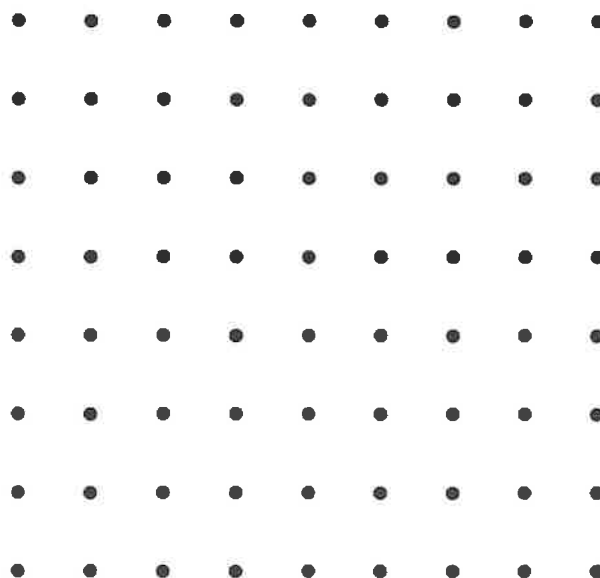
3. Draw a quadrilateral in which 2 opposite sides are parallel and the other 2 sides are not parallel.
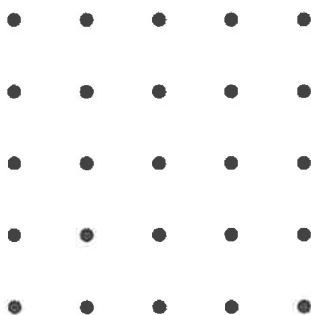
4. What is a quadrilateral that has four equal sides but is not a square?

_____

S2

Name: _____ Date: _____ Time: _____

Comparing Prisms and Pyramids

1. Draw or write the names of two things that are the shape of a rectangular prism.	**2.** Draw or write the names of two things that are the shape of a cylinder.

3. Name the two geometric solids and list two ways they are alike.

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____
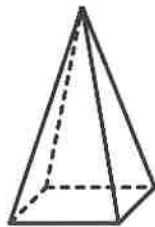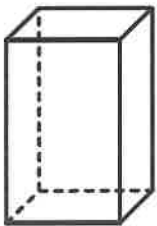
4. Name the two geometric solids and list two ways they are different.

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____
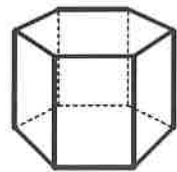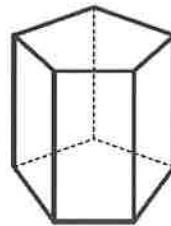
Finding Areas of Rectangles by Counting Squares

Draw each rectangle on the grid. Make a dot inside each small square in your rectangle.

1. Draw a 3-by-5 rectangle.
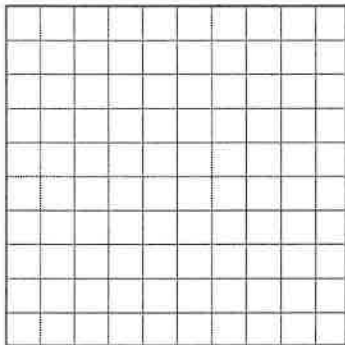
Area = _____ square units

2. Draw a 9-by-5 rectangle.
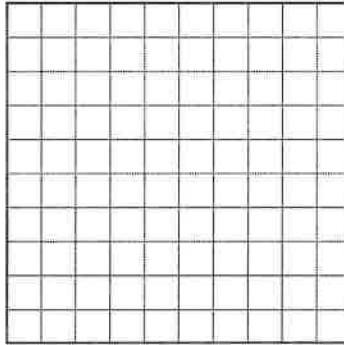
Area = _____ square units

3. Draw a 6-by-8 rectangle.
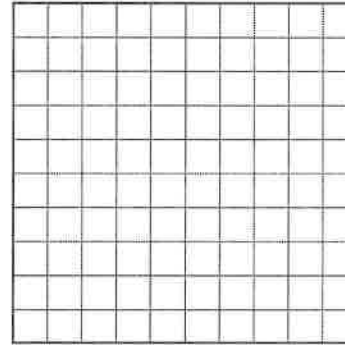
Area = _____ square units

Fill in the blanks.

4.
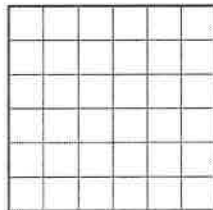
This is a _____-by-_____ rectangle.

Area = _____ square units

5.
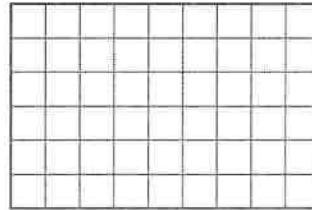
This is a _____-by-_____ rectangle.

Area = _____ square units

6.
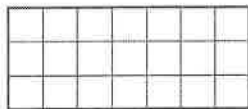
This is a _____-by-_____ rectangle.

Area = _____ square units

7.

This is a _____-by-_____ rectangle.

Area = _____ square units

Name _____ Date _____ Time _____
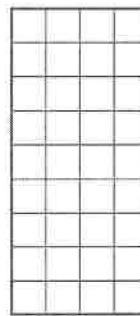
Counting Unit Squares to Find Area

Use the tick marks to draw lines to show square units.
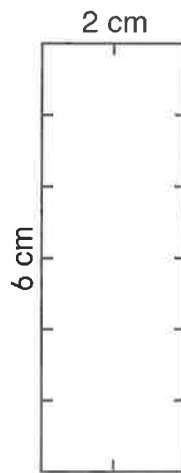Then count the squares to find the area.

1.

2 in.

3 in.

Area = _____ sq in.

2.

4 cm

3 cm

Area = _____ sq cm

3.

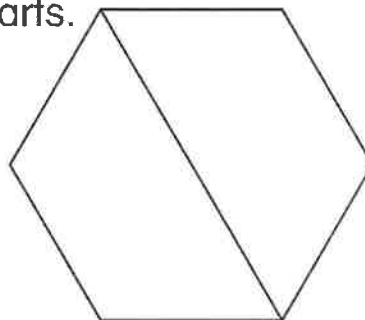4 cm

6 cm

Area = _____ sq cm

4.

2 cm

6 cm
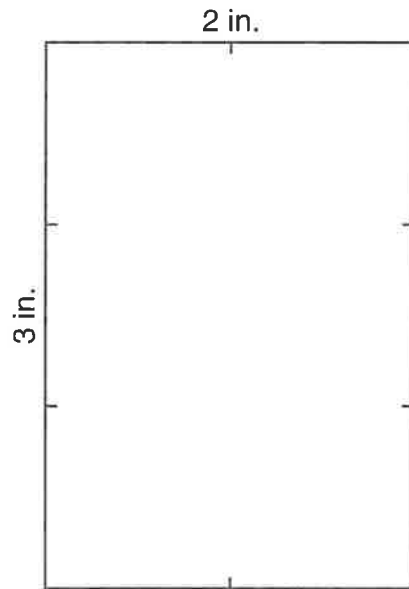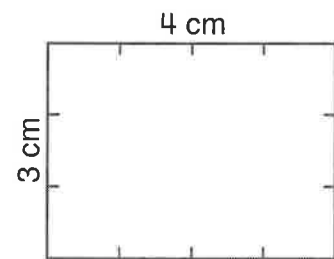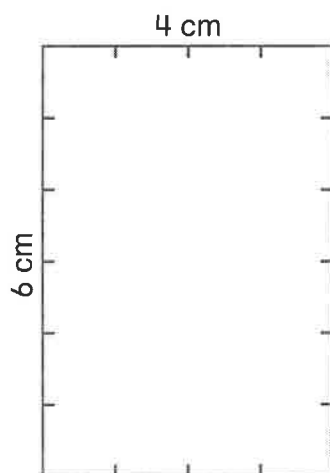
Area = _____ sq cm

Naming and Describing Fractional Parts of Shapes

Example: The shape is divided into __2__ equal parts.

Color 1 part.

Part colored $= \dfrac{1}{2}$ Part not colored $= \dfrac{\square}{\square}$

---

1. The shape is divided into ____ equal parts.

   Color 2 parts.

   Part colored $= \dfrac{\square}{\square}$ Part not colored $= \dfrac{\square}{\square}$

---
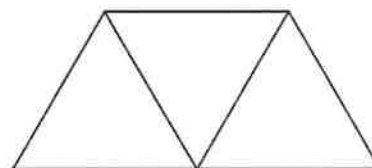
2. The shape is divided into ____ equal parts.

   Color 3 parts.

   Part colored $= \dfrac{\square}{\square}$ Part not colored $= \dfrac{\square}{\square}$

---
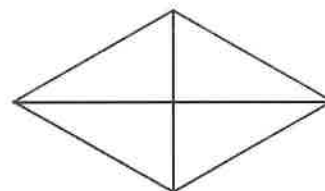
3. The shape is divided into ____ equal parts.

   Color 1 part.

   Part colored $= \dfrac{\square}{\square}$ Part not colored $= \dfrac{\square}{\square}$
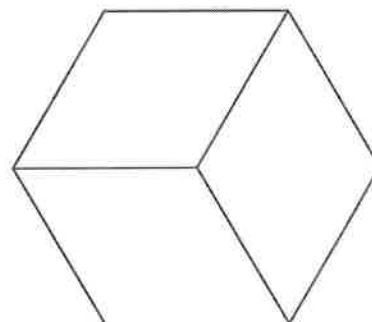
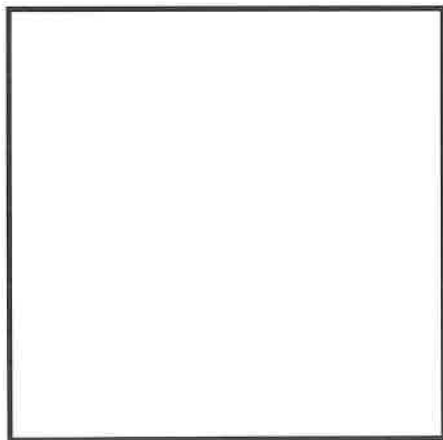# Folding and Labeling Fractions of Squares

1. Divide the square into 2 equal parts. Label each part with a unit fraction.
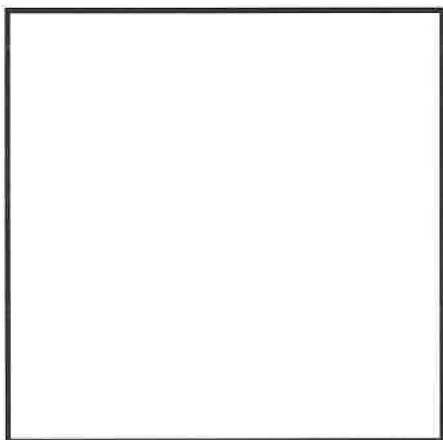
2. Divide the square into 3 equal parts. Label each part with a unit fraction.
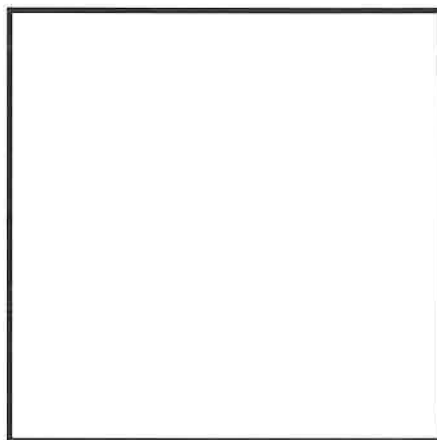
3. Divide the square into 4 equal parts. Label each part with a unit fraction.

4. Is there another way to divide the square into 4 equal parts?