Math Distance Learning Packet

Grade 2

Student Version

Solve One-Step Word Problems

Name: _____

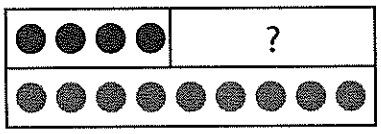
Prerequisite: Use Models to Solve Problems

Study the example showing how to use a bar model to solve a word problem. Then solve Problems 1–6.

Example

Ed has 4 black crayons and 9 green crayons. How many more green crayons are there?

Draw a picture to show what you know.



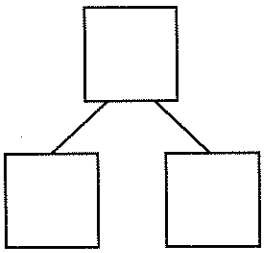
Use the picture to write a number sentence. Solve.

$4 + ? = 9$

$4 + 5 = 9$

There are 5 more green crayons.

1 Use a number bond to model the Example problem. Write each number or symbol in the correct box.



2 Write a complete fact family for the Example problem.

_____

Solve.

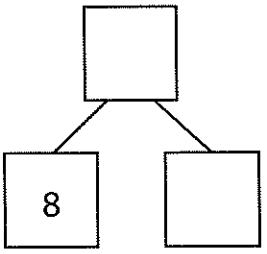
3 Troy has 8 points in a game. Then he gets more points. Now he has 12 points. How many more points does he get?

8 + _____ = 12

Troy gets _____ more points.

7	8	9	10	11	12	13	14	

4 Look at Problem 3. Model it using a number bond. Then write a subtraction sentence.



_____ − _____ = _____

5 Liz has 15 CDs. 9 are music CDs. The rest are story CDs. How many are story CDs?

Show your work.

Number sentence: _____

There are _____ story CDs.

6 There are 13 cartons of milk and 6 straws. How many fewer straws are there?

Show your work.

Number sentence: _____

There are _____ fewer straws.

Name: _____

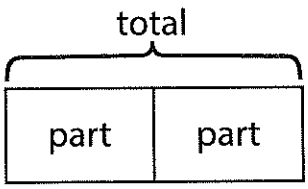
Solve Take-Apart Word Problems

Study the example showing one way to solve a take-apart word problem. Then solve Problems 1–5.

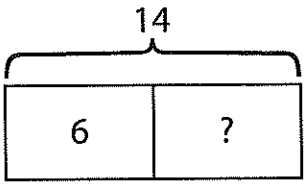
Example

A cart has 14 books. There are 6 on the bottom shelf. The rest are on the top shelf. How many books are on the top shelf?

You can use a tape diagram.



Write what you know.



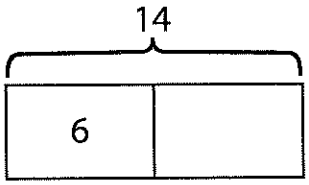
Write a number sentence. Solve.

$14 - 6 = ?$

$14 - 6 = 8$

There are 8 books on the top shelf.

1 Complete the tape diagram for the Example problem. Then complete the number sentence.



14 = _____ + _____

2 Look at the number sentence you wrote in Problem 1. Explain what your number sentence says about the books in the Example.

_____

_____

_____

Solve.

3 Rik picked 16 apples. He keeps 9 apples. He gives the rest to friends. How many apples does Rik give his friends?

Circle *Yes* or *No* to show if the information is given in the problem.

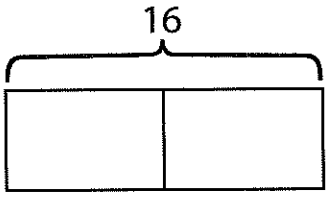
a. the number of apples Rik picked — Yes No

b. the number of apples Rik gives his friends — Yes No

c. the number of apples Rik ate — Yes No

d. the number of apples Rik keeps — Yes No

4 Look at Problem 3. Complete a tape diagram and solve the problem. Tell how you found your answer.



Rik gave his friends _____ apples.

_____

_____

5 There are 11 frogs at the pond. There are 5 frogs in the water. The rest are in the mud. How many frogs are in the mud?

Show your work.

Answer: _____

Name: _____

Solve Comparison Word Problems

Study the example showing a way to solve a comparison word problem. Then solve Problems 1–4.

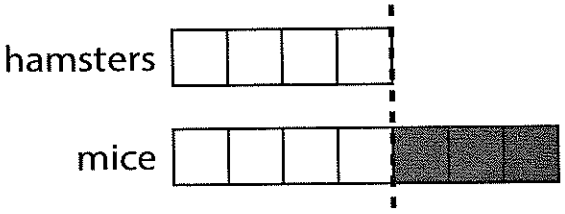
Example

Maya has 4 hamsters and some mice. She has 3 fewer hamsters than mice. How many mice does Maya have?

Think about what you know.

There are **3 fewer hamsters** than mice. That means there are **3 more mice** than hamsters.

Draw a picture.



Write a number sentence. $4 + 3 = 7$

Maya has 7 mice.

1 There are 4 fewer markers than crayons. Circle *fewer* or *more* to complete each sentence.

There are 4 **fewer/more** markers than crayons.

That means there are 4 **fewer/more** crayons than markers.

Solve.

2 There are 4 fewer markers than crayons. There are 6 markers. How many crayons are there?

Show your work.

Answer: _____

3 There are 8 children standing. There are 3 fewer children standing than sitting. How many children are sitting? Circle the correct answer.

A 3 **C** 8

B 5 **D** 11

4 Dara has 12 red counters. She has 7 more red counters than yellow counters. How many yellow counters does Dara have?

Show your work.

Answer: _____

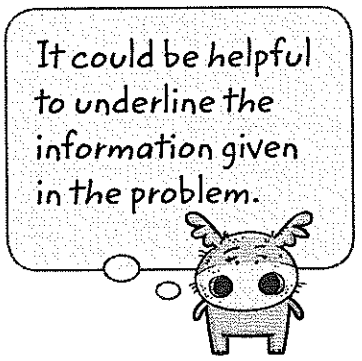
Name: _____

Solve Different Kinds of Word Problems

Solve the problems.

1 Sid has 17 flowers. There are 8 blue flowers. The rest are yellow. How many flowers are yellow?

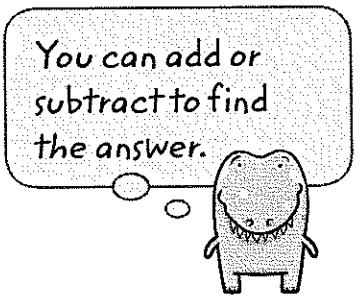
Circle *Yes* or *No* to show if the information is given in the problem.



a.	the number of yellow flowers	Yes	No
b.	the number of red flowers	Yes	No
c.	the number of blue flowers	Yes	No
d.	the total number of flowers	Yes	No

2 Sid has 17 flowers. There are 8 blue flowers. The rest are yellow. How many flowers are yellow?

Circle the correct answer.



A 8 **C** 17

B 9 **D** 20

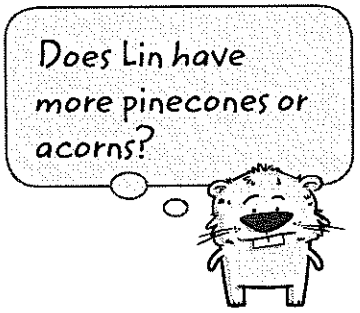
Solve.

3 There are 9 dancers in a play. There are 3 more dancers than singers in the play. How many singers are in the play?

Show your work.

Answer: _____

4 Lin has 4 pinecones and some acorns. She has 7 fewer pinecones than acorns. How many acorns does Lin have? Circle the correct answer.



A 3 **C** 7

B 4 **D** 11

Tom chose **A**. This is wrong. How did Tom get his answer?

_____

_____

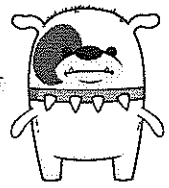
_____

_____

_____

Name: _____

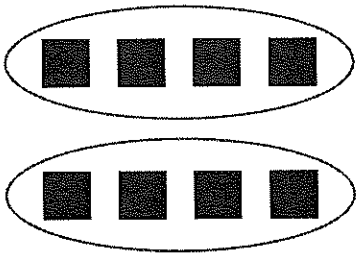
Prerequisite: What are doubles facts and doubles + 1 facts?



Study the example showing doubles and doubles + 1 facts. Then solve Problems 1–5.

Example

This picture shows two equal groups. You can write a doubles fact to show how many in all.

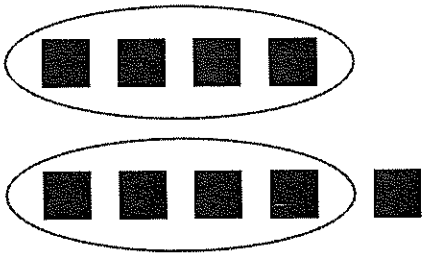


4 squares

4 squares

$4 + 4 = 8$

In this picture, one group has 1 more than the other group. You can write a doubles + 1 fact to show how many in all.

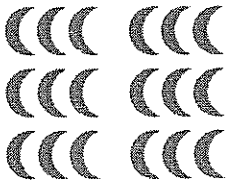


4 squares

4 squares + 1 square

$4 + 4 + 1 = 9$

1 Circle two equal groups. Then complete the doubles fact to show how many in all.



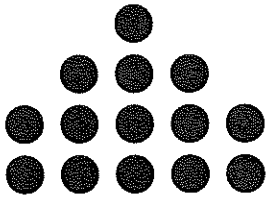
_____ + _____ = _____

Solve.

2 Circle to show two equal groups of stars with 1 leftover. Then complete the doubles + 1 fact to show how many in all.

_____ + _____ + 1 = _____

3 Circle two equal groups of dots. Then write a doubles fact to show how many in all.



_____ + _____ = _____

4 Look at the two equal groups in Problem 3. How are they alike? How are they different?

_____

_____

_____

_____

5 Complete the doubles + 1 fact. Then tell how you decided what numbers to write.

_____ + _____ + 1 = 13

_____

_____

_____

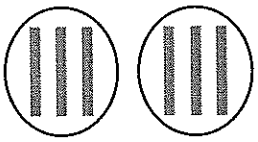
Name: _____

Identify Even and Odd Numbers

Study how the example shows different ways to decide if a number is odd or even. Then solve Problems 1–6.

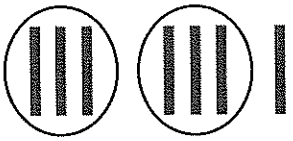
Example

The sum of a doubles fact is an even number.



$3 + 3 = 6$ 6 is an even number.

The sum of a doubles + 1 fact is an odd number.



$3 + 3 + 1 = 7$ **7** is an odd number.

1 Write a doubles fact for 12. Is 12 odd or even? Circle the correct answer.

odd

_____ + _____ = _____

even

2 Write a doubles + 1 fact for 15. Is 15 odd or even? Circle the correct answer.

odd

_____ + _____ + 1 = _____

even

Vocabulary

even number
an even number of objects can be put into pairs or equal groups.

odd number
an odd number of objects cannot be put into pairs or equal groups without a leftover.

Solve.

3 Circle the even numbers.

11 14 20 17 16

4 Write a doubles fact for each even number in Problem 3. Fill in the table.

Even Numbers	Doubles Facts

5 Evan has an even number of shells. He has more than 10 shells and less than 15 shells. How many could he have? Tell how you know.

6 Think of the different ways you know to tell if a number is odd or even. Which way do you think you will use most often? Why?

Name: _____

Reason and Write

Look at the example. Underline a part that you think makes it a good answer.

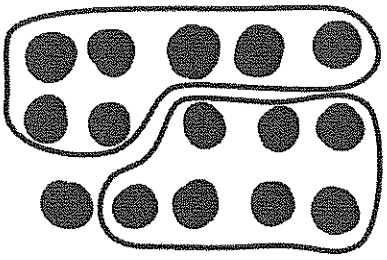
Example

Tell whether 15 is odd or even.

Explain in two different ways why your answer is correct. Use pictures, words, or numbers.

Show your work.

15 is an ___odd___ number.

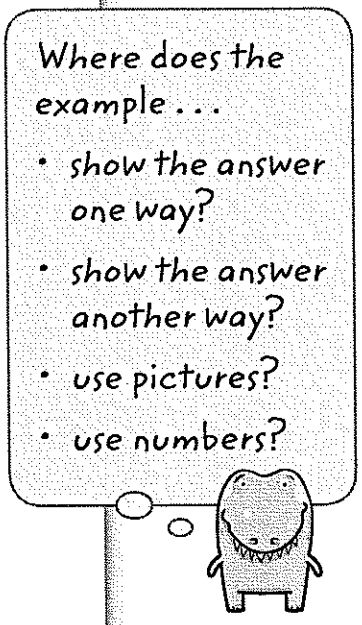


I can't put 15 dots into two equal groups. That means 15 is an odd number.

Also, 15 is one more than 14. I can write a doubles fact for 14. That means I can write a doubles + 1 fact for 15. So, 15 is an odd number.

14 = 7 + 7

15 = 7 + 7 + 1



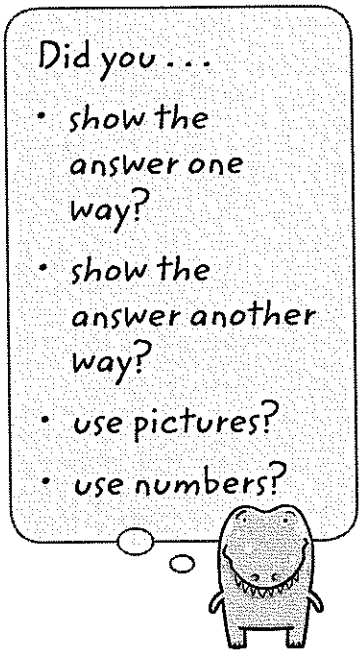
Solve the problem. Use what you learned from the example.

Tell whether 18 is odd or even.

Explain in two different ways why your answer is correct. Use pictures, words, or numbers.

Show your work.

18 is an _____ number.



Solve Two-Step Word Problems

Name: _____

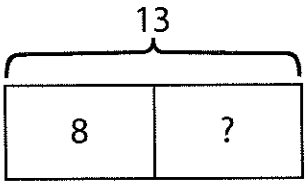
Prerequisite: Solve One-Step Word Problems

Study the example showing using a model to solve a word problem. Then solve Problems 1–5.

Example

Rex has 8 snails in a bucket. He finds more. Now he has 13 snails. How many more snails did Rex find?

Use a model. Write what you know.



Write a number sentence. Solve.

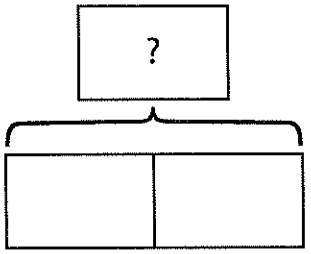
$13 = 8 + ?$

$13 = 8 + 5$

Write the anwer: Rex found 5 more snails.

1 Some paintbrushes are in a jar. Jen takes out 4. Now there are 8 left. How many paintbrushes were in the jar to start?

Show your work.



Answer: _____

2 Compare the models in the Example and in Problem 1. Explain why the question mark (?) is in a different place in each.

_____

_____

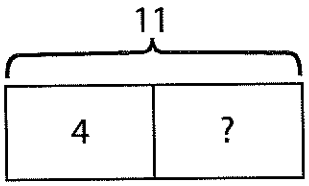
Solve.

3 A pet store has 9 dog leashes. It has 8 fewer dog leashes than dog collars. How many dog collars does the store have?

Show your work.

Answer: _____

4 Write a problem that can be solved using this tape diagram.



_____

_____

_____

_____

5 Show how to solve the problem you wrote in Problem 4.

_____

_____

_____

_____

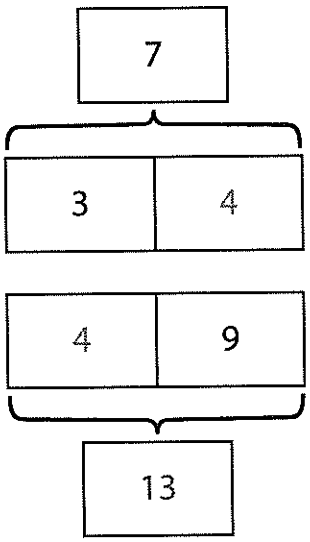
Name: _____

Use Tape Diagrams to Solve Two-Step Problems

Study the example showing one way to solve a two-step problem. Then solve Problems 1–4.

Example

There are 7 balls in the gym closet. Then 3 balls are taken out. After class, 9 balls are returned. How many balls are in the closet now?



Step 1 7 balls − 3 balls = 4 balls

Step 2 4 balls + 9 balls = **13** balls

Answer: There are 13 balls in the closet now.

1 Jay has 13 posters for the book fair. He hangs 5 in the morning. Then he hangs 4 more in the afternoon. How many posters does Jay have left?

Circle a number sentence for Step 1.

Underline a number sentence for Step 2.

5 − 4 = 1	13 − 4 = 9
8 − 4 = 4	13 − 5 = 8

2 Jay has _____ posters left.

Vocabulary

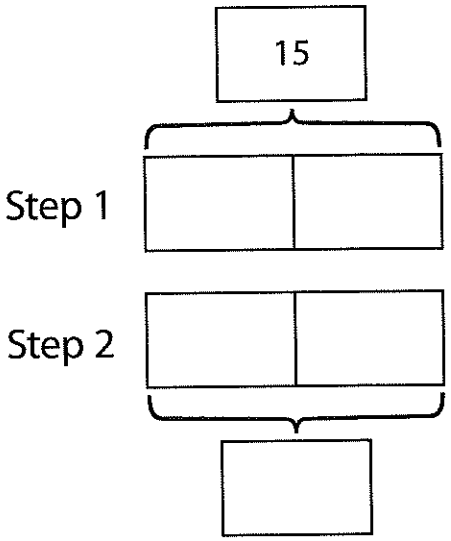
two-step problem a word problem you need two steps to solve.

Solve.

3 There are 15 people on a train. At the first stop 8 people get off the train and 3 people get on. How many people are on the train now?

Complete the tape diagrams.

Show your work.



Answer: _____

_____

4 A box holds 12 markers. Nan takes out 6. Then she puts 2 back. Are there enough markers in the box for Fen to take out 10? Explain.

Show your work.

_____

_____

_____

Name: _____

Use Open Number Lines to Solve Two-Step Problems

Study the example showing one way to solve two-step problems. Then solve Problems 1–5.

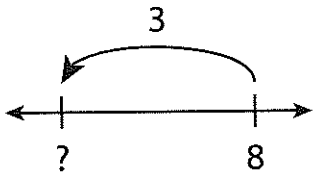
Example

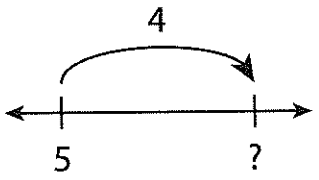
There are 8 apples and some bananas on the counter. Someone buys 3 apples. Now there are 4 more bananas than apples. How many bananas are there?

Step 1 8 apples − 3 apples

Step 2 There are 5 apples.
There are 4 more bananas than apples.

Answer: There are 9 bananas.





1 Look at the Example. Then complete the number sentences to show Step 1 and Step 2.

Step 1 8 − _____ = _____

Step 2 _____ + 4 = _____

2 Think about the Example. Could you do Step 2 first? Explain.

_____

_____

_____

Solve.

3 There are 9 players on the field. Then 6 more players come to the field. They make two teams. There are 8 players on one team. How many are on the other team?

Show your work.

Answer: _____

4 Val has 11 bunnies in a pen. Then he sells 4 bunnies. Then some bunnies are born. Now there are 13 bunnies in the pen. How many bunnies are born?

Circle the correct answer.

A 6 **C** 8

B 7 **D** 9

5 Look at Problem 4. If Val has 14 bunnies at the end instead of 13 bunnies, would Step 1 change? Would Step 2 change? Explain.

_____

_____

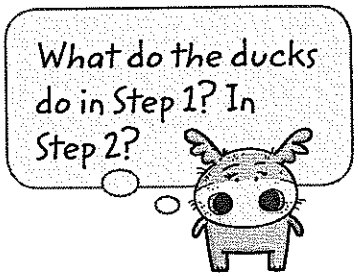
_____

Name: _____

Solve Two-Step Word Problems

Solve the problems.

1 There are 18 ducks in the pond. First 9 ducks fly away. Then 3 more ducks fly away. How many ducks are in the pond now? Circle the correct answer.



A 3 **C** 9

B 6 **D** 12

2 Will has 8 stickers. He gives 2 to Sara. Then he puts some on his lunch bag. He has 4 stickers left. How many does he put on his lunch bag? Circle the correct answer.

A 2 **C** 6

B 4 **D** 10

Sam chose **D**. This answer is wrong. How did Sam get her answer?

_____

_____

_____

_____

_____

_____

Solve.

3 Sal has 8 balloons. He has 3 red balloons. The rest are blue. Kay has 5 more blue balloons than Sal. How many blue balloons does Kay have? Circle the correct answer.

A 5

B 8

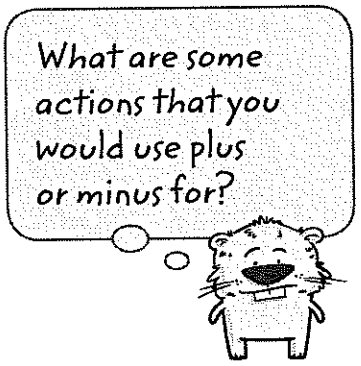
C 10

D 16

4 Choose a number sentence.

$3 + 8 = 11$ $\quad 2 + 5 = 7$

$15 - 6 = 9$ $\quad 9 - 4 = 5$



Write a two-step word problem. Your number sentence must be used to solve one of the steps.

Read and Write Three-Digit Numbers

Name: _____

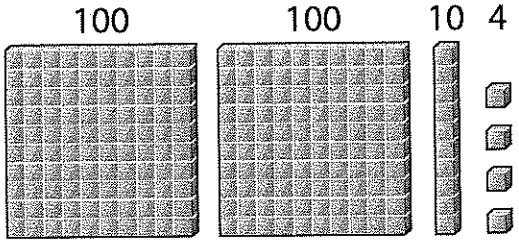
Prerequisite: Write Three-Digit Numbers as Hundreds, Tens, and Ones

Study the example showing how to write hundreds, tens, and ones. Then solve Problems 1–5.

Example

How many hundreds, tens, and ones are in 214?

Use a model.

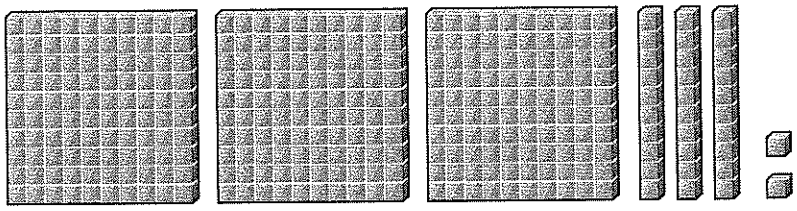


Write in a chart.

Hundreds	Tens	Ones
2	1	4

2 hundreds + 1 ten + 4 ones

1 How many hundreds, tens, and ones are in 332?



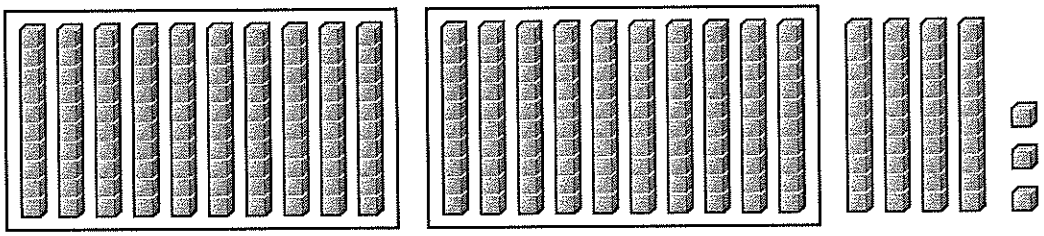
_____ hundreds + _____ tens + _____ ones

2 Complete the chart to show 7 hundreds + 5 tens + 8 ones.

Hundreds	Tens	Ones

Solve.

3 This model shows 243 in tens. How many tens are in 243? How many ones are left over?

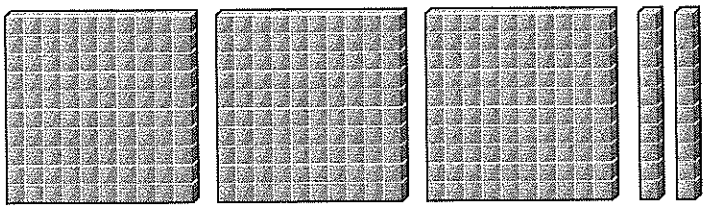


243 = _____ tens and _____ ones

4 Show 492 in two different ways.

Hundreds	Tens	Ones

5 Greg did this problem. What did he do wrong? Explain.



3 hundreds + 2 tens = 32

Name: _____

Find the Value of Three-Digit Numbers

Study the example about showing three-digit numbers in different ways. Then solve Problems 1–6.

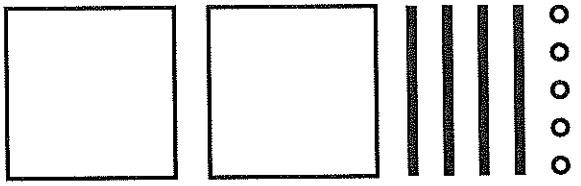
Example

In a game, Jan pays money to the bank. She pays 2 hundreds bills, 4 tens bills, and 5 ones bills. What is the total value of the bills Jan pays?

Write a number sentence.

$200 + 40 + 5 = 245$ dollars

Make a quick drawing.



Use a chart.

Hundreds	Tens	Ones
2	4	5

Bob plays a board game that uses play money. He wins 3 hundreds bills, 7 tens bills, and 7 ones bills.

1 How many hundreds, tens, and ones are there?

_____ hundreds _____ tens _____ ones

2 Write a number sentence to find the total value of the bills.

_____ + _____ + _____ = _____

3 What is the total value of the bills Bob wins?

_____ dollars

Vocabulary

digit a symbol used to write numbers. The digits are: 0, 1, 2, 3, 4, 5, 6, 7, 8, 9.

value how much something is worth.

Solve.

4 Ali plays a board game that uses play money. He wins 8 hundreds bills and 6 ones bills. What is the total value of the bills Ali wins? Fill in the chart, then write the answer.

Hundreds	Tens	Ones

Show your work.

Answer: _____

5 Audra has 533 comic books. Write or draw to show this number in a different way.

6 What is another way to show each number? Draw lines to connect each number to another way to write the number.

784	874	748
800 + 70 + 4	700 + 80 + 4	700 + 40 + 8

Name: _____

Read and Write Three-Digit Numbers

Solve the problems.

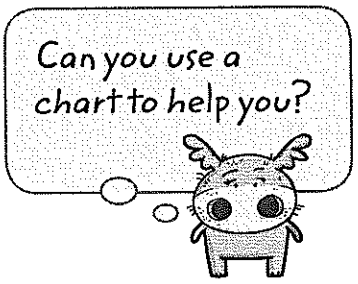
1 Which number is the same as 800 + 30? Circle the correct answer.

A 803

C 830

B 83

D 308



2 Bev wrote these clues about her secret number.

- The number has 5 hundreds.
- The tens digit is 1 less than 9.
- The number has more ones than tens.

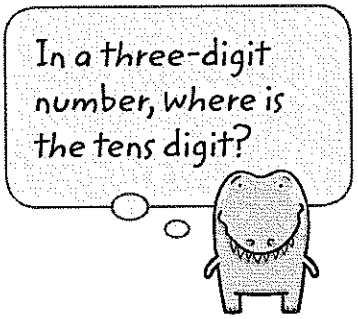
What is the number? Circle the correct answer.

A 589

C 959

B 598

D 590



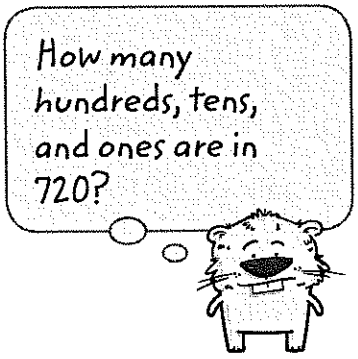
3 What is true about the number 720? Circle all the correct answers.

A It equals 72 tens.

B It is 700 + 2.

C It has 7 hundreds and 20 ones.

D It is 700 + 20.

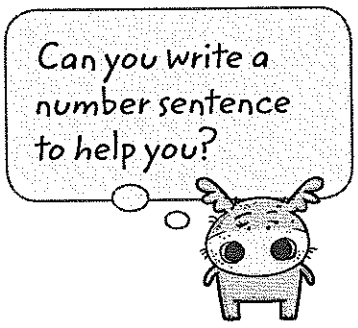


Solve.

4 Here are clues about a secret number. What is the number?

- The hundreds digit has a value of 300.
- The tens digit is 1 less than 2.
- The ones digit is the same as the hundreds digit.

Show your work.



Answer: _____

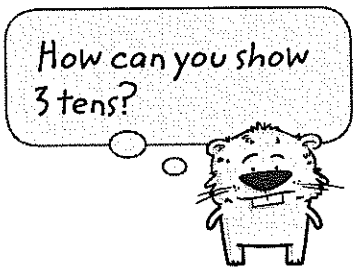
5 What is another way to show 4 hundreds and 3 tens? Circle the correct answer.

A 43

C 403

B 400 + 3

D 400 + 30



Zack chose **C**. This is wrong. How did Zack get his answer?

_____

_____

_____

Add Three-Digit Numbers

Name: _____

Prerequisite: Add Two-Digit Numbers

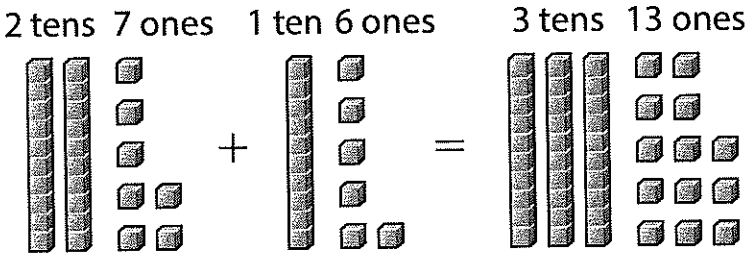
Study the example showing how to add two-digit numbers. Then solve Problems 1–7.

Example

Find 27 + 16.

You can add tens and add ones.

$$27 = 20 + 7$$
$$\underline{16 = 10 + 6}$$
$$30 + 13 = 43$$



There are 48 red grapes and 24 green grapes in a salad.

1 Write the tens and ones.

48 = _____ + _____

24 = _____ + _____

2 Add the tens. Then add the ones.

_____ + _____ = 60

_____ + _____ = 12

3 Show how to find how many grapes there are in all.

_____

_____

Solve.

Luke played piano for 58 minutes yesterday. He played piano for 27 minutes today.

4 Write the tens and ones.

58 = _____ + _____

27 = _____ + _____

5 How many total minutes did Luke play piano?

Show your work.

Answer: _____ minutes

Ms. Patel has 29 blue pens, 17 red pens, and 35 red crayons.

6 How many red pens and red crayons does Ms. Patel have?

Show your work.

Answer: _____

7 How many blue pens and red pens does Ms. Patel have?

Show your work.

Answer: _____

Name: _____

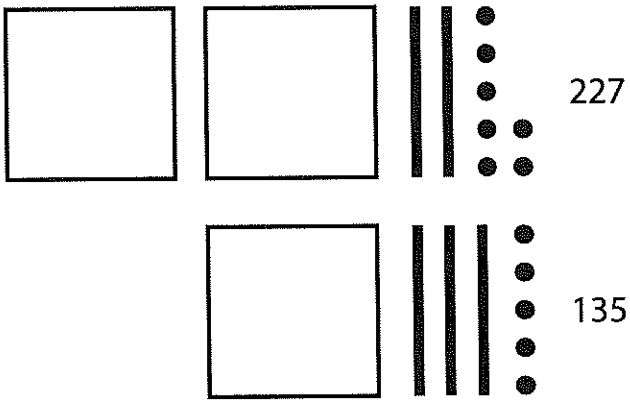
Add Hundreds, Tens, and Ones

Study the example showing two ways to add three-digit numbers. Then solve Problems 1–7.

Example

Solve 227 + 135.

You can make a quick drawing. →



3 hundreds + 5 tens + 12 ones

You can break apart the addends.

$$\begin{array}{rl} 227 \longrightarrow & 200 + 20 + 7 \\ +\ 135 \longrightarrow & 100 + 30 + 5 \\ \hline & 300 + 50 + 12 \end{array}$$

$227 + 135 = 362$

There are 416 oak trees and 238 pine trees in the park.

1 Fill in the boxes to help you find the total.

$$\begin{array}{rl} 416 \longrightarrow & 400 + \ 10 \ + \ 6 \\ +\ 238 \longrightarrow & 200 + \ 30 \ + \ 8 \\ \hline & \square + \square + 14 \end{array}$$

2 14 ones = _____ ten + _____ ones

3 How many trees are there altogether?

_____ trees

Solve.

Paul has 547 beads. Amy has 219 beads.

4 Fill in the boxes.

$$\begin{array}{rl} 547 \longrightarrow & 500 + 40 + 7 \\ +\ 219 \longrightarrow & \square + \square + \square \\ \hline & \square + \square + \square \end{array}$$

5 Add hundreds, tens, and ones to solve.

Show your work.

_____ beads

A zoo has 146 birds and 628 bugs. It also has 258 snakes and 338 fish.

6 How many birds and bugs are there?

Show your work.

$$\begin{array}{r} 146 \\ +\ 628 \\ \hline \end{array}$$

Answer: _____

7 How many snakes and fish are there?

Show your work.

258 + 338

Answer: _____

Name: _____

Add Three-Digit Numbers

Study the example showing how to add hundreds, tens, and ones. Then solve Problems 1–5.

Example

Solve 346 + 487.

You can add hundreds, then tens, then ones.

$$\begin{array}{r} 346 \\ +\ 487 \\ \hline \end{array}$$

700 ⟶ 300 + 400
120 ⟶ 40 + 80
13 ⟶ 6 + 7

700 + 120 + 13 = 833

You can add ones, then tens, then hundreds.

$$\begin{array}{r} 346 \\ +\ 487 \\ \hline \end{array}$$

13 ⟶ 6 + 7
120 ⟶ 40 + 80
700 ⟶ 300 + 400

13 + 120 + 700 = 833

Mina's class collects 368 cans to recycle. Willa's class collects 254 cans.

1 Fill in the boxes to show how you can add hundreds, then tens, then ones.

$$\begin{array}{r} 368 \\ +\ 254 \\ \hline \end{array}$$

$$\square$$

110

$$\square$$

2 How many cans do the classes collect altogether?

_____ + 110 + _____ = _____

Solve.

3 Show how to find 579 + 358.

4 Show how you can add 157 and 296.

5 Use the numbers in the box. Find the greatest sum that you can. Then find the smallest sum. Tell how you got your answer.

268	275	242	259

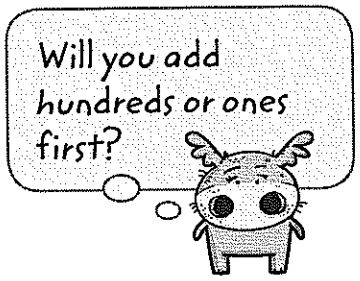
Name: _____

Add Three-Digit Numbers

Solve the problems.

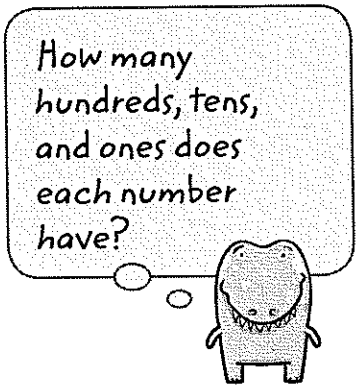
1 Charlie has 378 play coins. Ting has 147. How many coins do Charlie and Ting have in all?

Show your work.



Answer: _____

2 A flower store sells 285 roses in the morning and 260 roses in the afternoon. Which addition problem shows how many roses the store sells in all? Circle the correct answer.



A 200 + 140 + 50

B 200 + 140 + 5

C 400 + 140 + 5

D 400 + 140 + 50

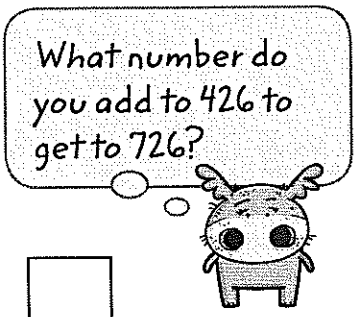
Lance chose **B**. This is wrong. How did Lance get his answer?

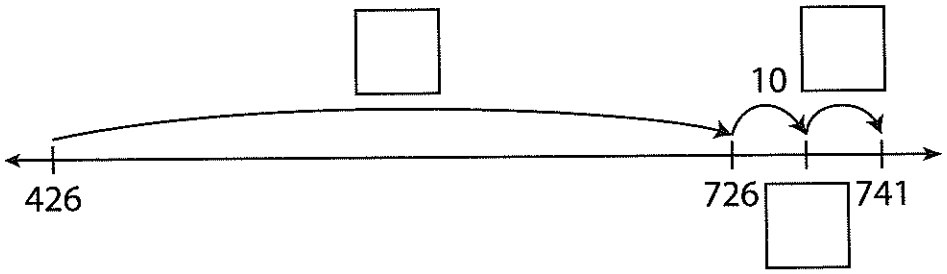
_____

_____

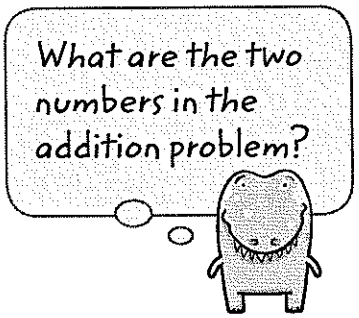
Solve.

3 Find 426 + 315. Write the missing numbers on the open number line below.





4 Macy needs to double the number 439. What addition problem can she use? Circle all the correct answers.



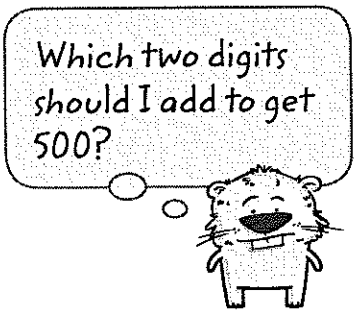
A 18 + 60 + 800

B 400 + 60 + 18

C 800 + 60 + 10 + 8

D 800 + 60 + 90

5 Elsa writes 500 + 70 + 6. What two-digit numbers could she be adding? Circle the correct answer.



A 371 + 275

B 145 + 421

C 403 + 273

D 252 + 324

Subtract Three-Digit Numbers

Name: _____

Prerequisite: Subtract Two-Digit Numbers

Study the example showing one way to subtract two-digit numbers. Then solve Problems 1–6.

Example

Find $64 - 27$.

$64 - 27 = ?$ is the same as $27 + ? = 64$.
Add up.

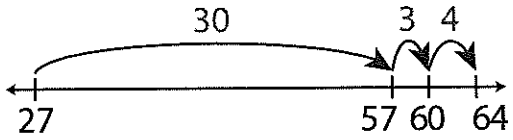
$27 + 30 = 57$

$57 + 3 = 60$

$60 + 4 = 64$

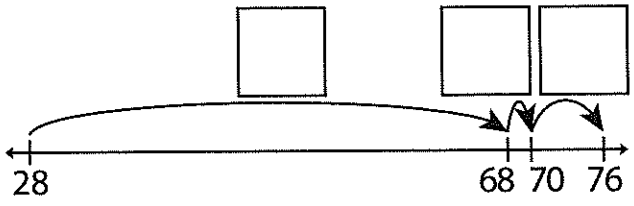
$30 + 3 + 4 = 37$

$64 - 27 = 37$



Ed has 76 red and yellow tulips. There are 28 red tulips. How many tulips are yellow?

1 Find $76 - 28$ by adding up. Fill in the blanks on the number line.



2 Add to find the number of yellow tulips. Fill in the blanks.

_____ + _____ + _____ = _____

Solve.

There were 35 birds in a tree. Then 17 birds flew away. How many birds are in the tree now?

3 Regroup a ten first. Fill in the blank.

35 = 2 tens and _____ ones

4 Find 35 − 17. Subtract tens and ones.

Show your work.

Answer: _____ birds left

Hector and Rose each have 93 baseball cards. Hector gives 54 cards to his brother. Rose gives 48 cards to her friend.

5 How many baseball cards does Hector have now? Find 93 − 54.

Show your work.

Answer: _____

6 How many baseball cards does Rose have now? Find 93 − 48.

Show your work.

Answer: _____

Name: _____

Subtract Hundreds, Tens, and Ones

Study the example showing one way to subtract three-digit numbers. Then solve Problems 1–6.

Example

Find 874 − 235. Look at the ones:
4 ones < 5 ones. Regroup a ten in
874 as 10 ones.

874 = 800 + 70 + 4, or 800 + 60 + 14

$$\begin{array}{r} 800 + 60 + 14 \\ -\ 200 + 30 + \ \ 5 \\ \hline 600 + 30 + \ \ 9 \end{array} = 639$$

874 − 235 = 639

There are 546 students at Lincoln School. On Mondays, 327 students have art class. The rest have music class.

1 Find 546 − 327. First regroup a ten. Write the new ones. Then subtract.

$$\begin{array}{r} 500 + \ 30 + \square \\ -\ 300 + \ 20 + \ \ 7 \\ \hline \square + \square + \square \end{array}$$

2 How many students have music class?

_____

3 You can subtract hundreds, tens, and ones. Fill in the blanks.

546 − 300 = _____

246 − 20 = _____

226 − 7 = _____

Solve.

4 472 people saw the school play. On Saturday, 248 people saw the play. The rest saw it on Sunday. How many people saw the play on Sunday?

Show your work.

Answer: _____

5 Children made 220 paintings for the city art show. Girls made 117 paintings. How many paintings did boys make?

Show your work.

Answer: _____

6 Blake has 583 stickers. Sasha has 324 fewer stickers than Blake. How many stickers do they have in all?

Show your work.

Answer: _____

Name: _____

Regroup to Subtract Three-Digit Numbers

Study the example showing how to regroup to subtract three-digit numbers. Then solve Problems 1–7.

Example

Find 512 − 367.

Compare the digits in each place.

5 hundreds + 1 ten + 2 ones

3 hundreds + 6 tens + 7 ones

$5 > 3$ $1 < 6$ $2 < 7$

Regroup 512 two times.

$500 + 10 + 2$
$= 400 + 100 + 10 + 2$
$= 400 + 100 + 12$

100s	10s	1s
4	10	12
− 3	6	7
1	4	5

512 − 367 = 145

Jodi's book has 423 pages. She has read 275 pages. Her father asks her how many pages she has left.

1 Compare the digits in each place. Write < or > in each box.

4 hundreds + 2 tens + 3 ones
2 hundreds + 7 tens + 5 ones

4 ☐ 2 2 ☐ 7 3 ☐ 5

2 Show how to regroup. Fill in the blanks.

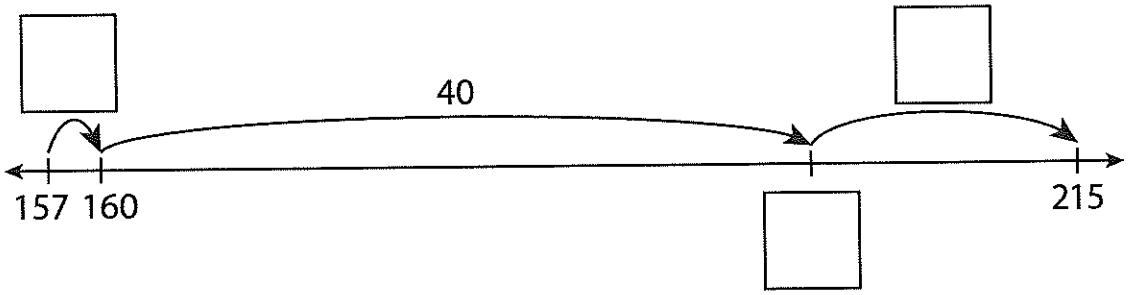
$400 + 20 + 3$
$= 300 +$ _____ $+ 10 + 10 +$ _____
$= 300 + 110 +$ _____

3 Fill in the chart to show the regrouping. Then subtract each place.

100s	10s	1s
3	11	☐
− 2	7	5
☐	☐	☐

Solve.

4 Fill in the blanks to show how you can add up to find 215 − 157.



5 How do you use the open number line in Problem 4 to find 215 − 157?

_____

6 Ken has 442 paper clips. There are 379 small paper clips. The rest are large. How many large paper clips are there?

Show your work.

Answer: _____

7 Tim solved a subtraction problem. Write a number sentence to show the problem and answer. Tell how you got your answer.

Tim's Answer:
863 + 7 = 870
870 + 30 = 900
900 + 50 = 950

_____

_____

_____

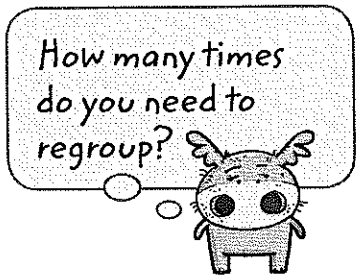
Name: _____

Subtract Three-Digit Numbers

Solve the problems.

1 Fill in the blanks to find 524 − 335.

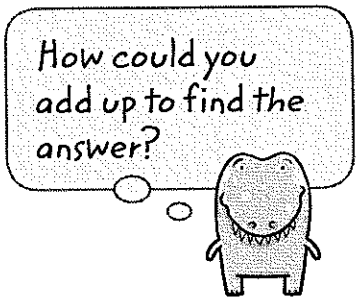
100s	10s	1s
4		14
− 3	3	5



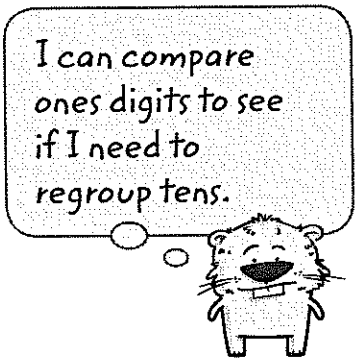
2 Sally has 237 marbles. Gina has 184 marbles. How many more marbles does Sally have? Circle the correct answer.

A 157 **C** 87

B 153 **D** 53



3 For each subtraction problem, tell if you need to regroup tens to get more ones. Then tell if you need to regroup hundreds. Circle *Yes* or *No* for Tens and Hundreds for each problem.

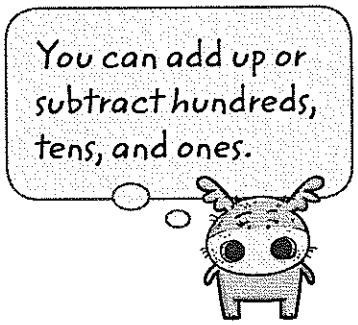


	Tens		Hundreds	
a. 643 − 225	Yes	No	Yes	No
b. 812 − 511	Yes	No	Yes	No
c. 574 − 396	Yes	No	Yes	No
d. 709 − 488	Yes	No	Yes	No

Solve.

4 There are 951 people in a parade. There are 728 people marching. The rest ride on floats. How many people ride on floats?

Show your work.

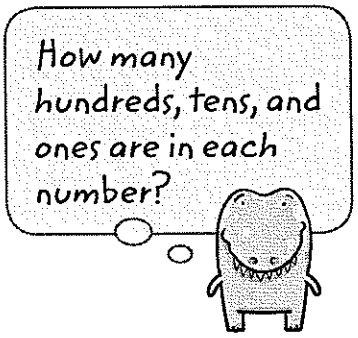


Answer: _____

5 Mr. Grant had 357 plums for sale. He sold some of them. Now he has 219 plums. How many plums did Mr. Grant sell? Circle the correct answer.

A 38 **C** 148

B 147 **D** 138



Matt chose **C**. This is wrong. How did Matt get his answer?

_____

_____

_____

Measure Length

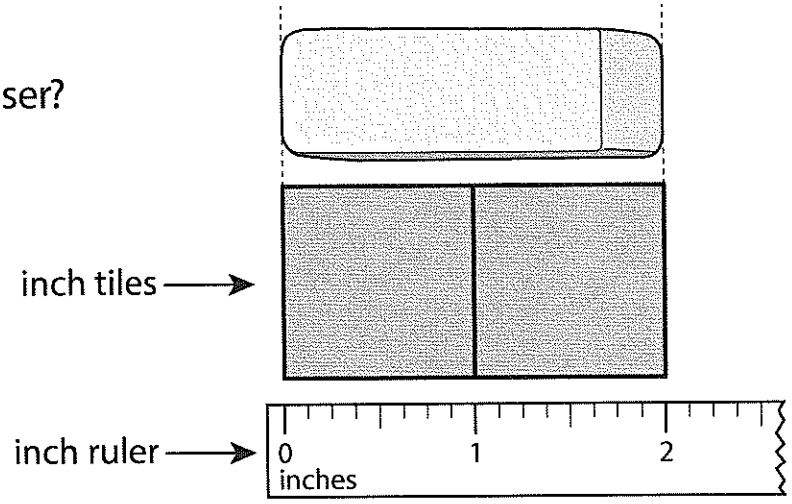
Name: _____

Prerequisite: Measure Using Tiles or a Ruler

Study the example showing how to measure length with inch tiles or a ruler. Then solve Problems 1–6.

Example

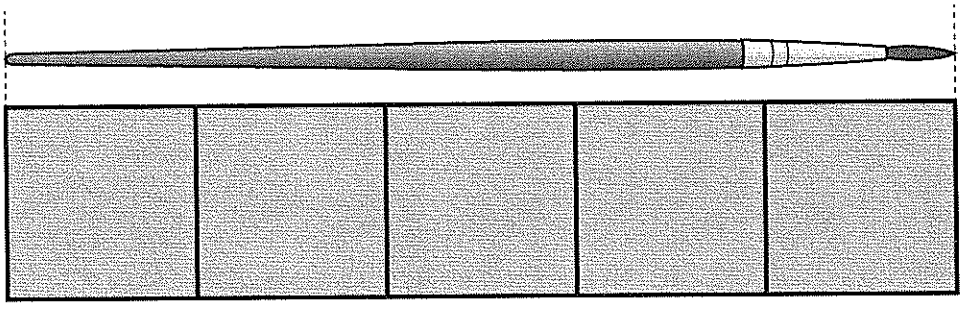
What is the length of the eraser?



The length of the eraser is 2 inches.

1 Hugo measured this paintbrush using 1-inch tiles. How many tiles are there?

_____

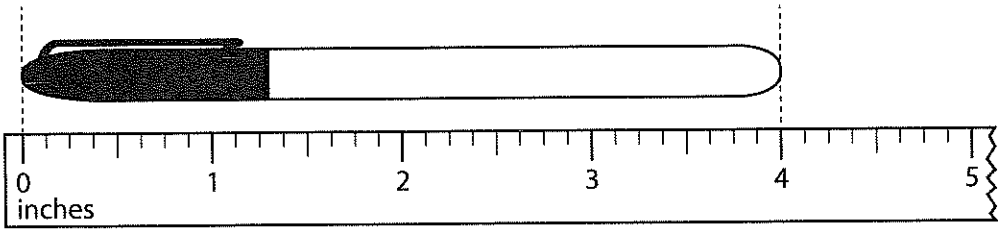


2 What is the length of the paintbrush?

_____ inches

3 Ron measured this marker using a 1-inch ruler. How long is the marker?

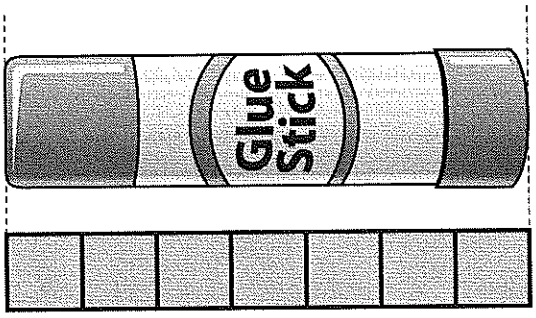
_____ inches



Solve.

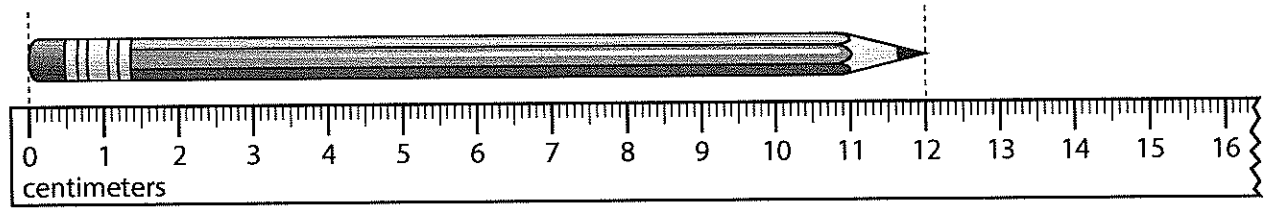
4 Lucy measured this glue stick using 1-centimeter tiles. How long is the glue stick?

_____ centimeters

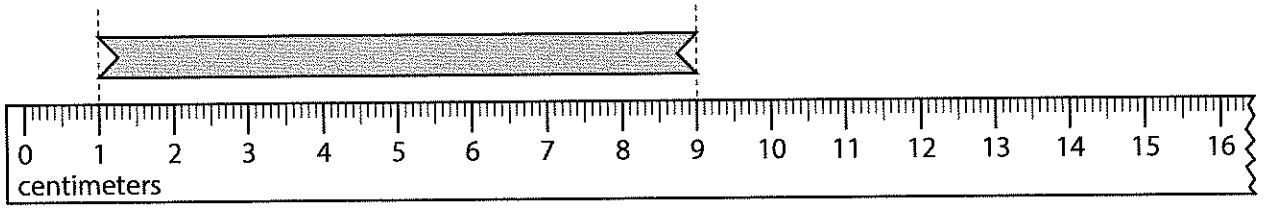


5 Ray measured this pencil using a centimeter ruler. What is the length of the pencil?

_____ centimeters



6 Eva measured this ribbon using a centimeter ruler. What did she do wrong?



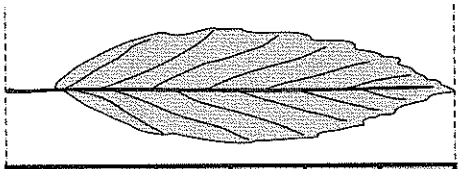
Name: _____

Measure Length

Study the example showing how to measure length with centimeter tiles or a ruler. Then solve Problems 1–5.

Example

What is the length of the leaf?



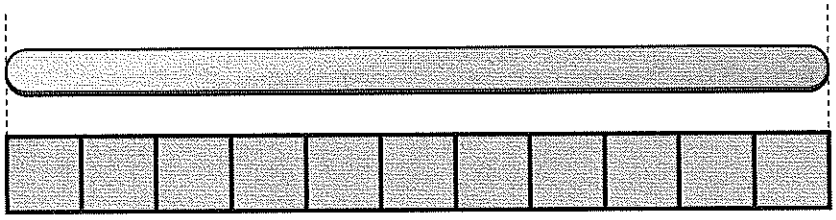
centimeter tiles →

centimeter ruler →

The length of the leaf is 6 centimeters.

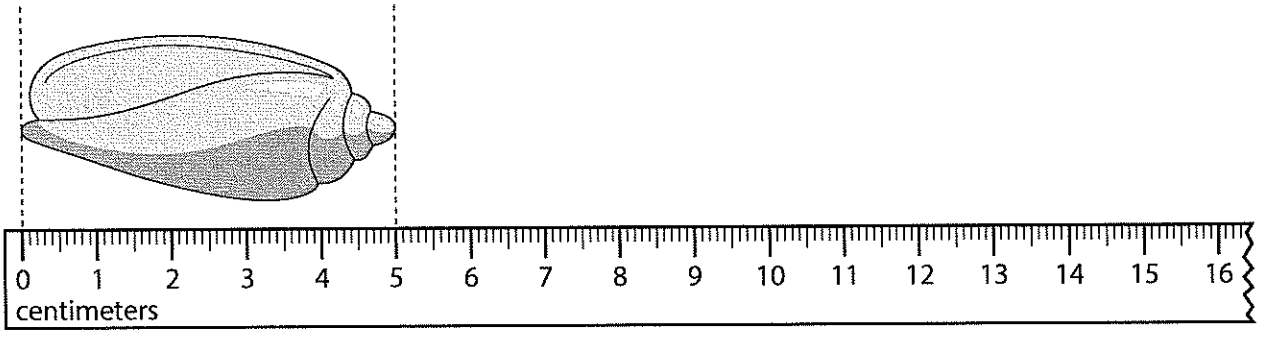
1 Hal used 1-centimeter tiles to measure this craft stick. How long is the craft stick?

_____ centimeters



2 Beth measured this shell using a centimeter ruler. What is the length of the shell?

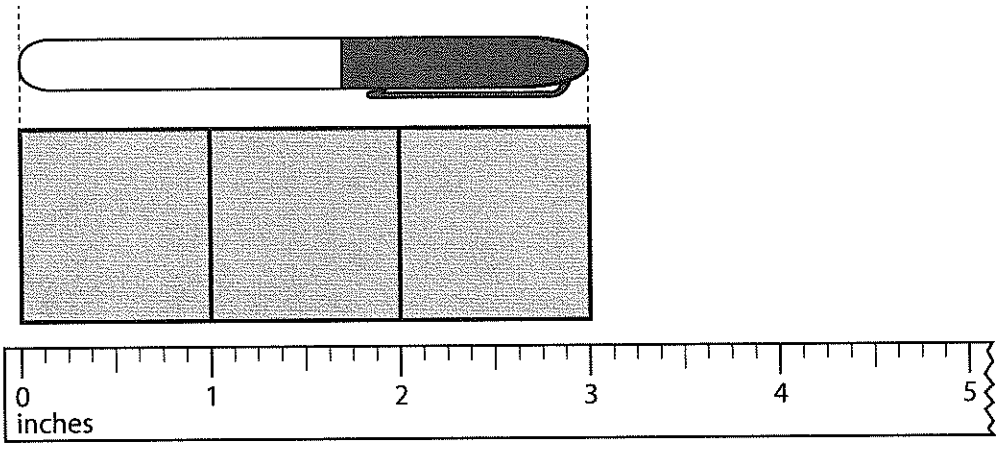
_____ centimeters



Solve.

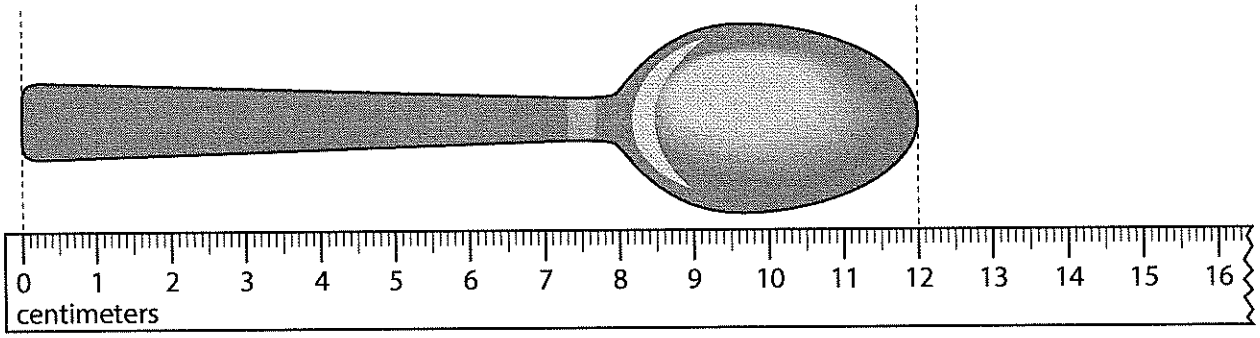
3 Marty measured this marker using 1-inch tiles and an inch ruler. What is the length of the marker?

_____ inches



4 Toni measured this spoon using a centimeter ruler. What is the length of the spoon?

_____ centimeters



5 If you could measure something using a centimeter ruler or 1-centimeter tiles, which would you use? Why?

_____

_____

_____

Name: _____

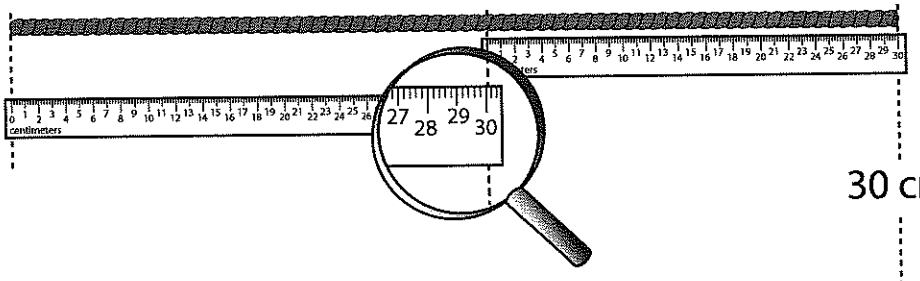
More Ways to Measure Length

Study the example showing ways to measure an object. Then solve Problems 1–5.

Example

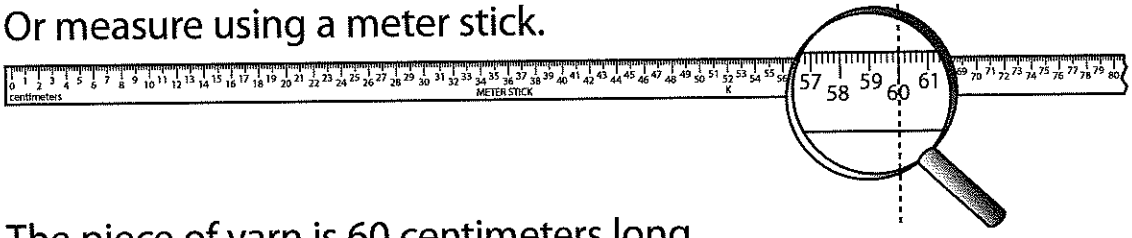
What is the length of the piece of yarn?

Use a ruler. The yarn is longer than a ruler. Mark where the ruler ends. Then move the ruler so that 0 is at your mark.



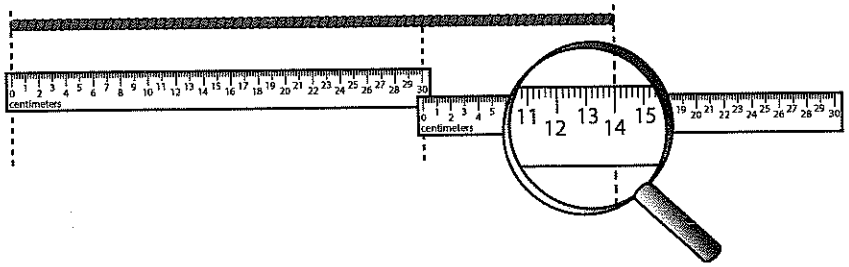
30 cm + 30 cm = 60 cm

Or measure using a meter stick.



The piece of yarn is 60 centimeters long.

Nora wants to measure a piece of string. What is the length of the string?



The rulers and meter stick on this page are not life-sized.

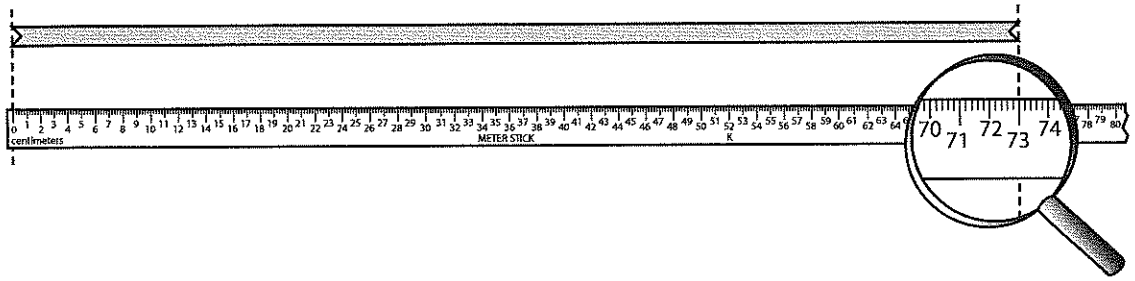
The ruler is 30 centimeters long.

1 Complete the number sentence. 30 cm + _____ cm = _____ cm

2 How long is the string? _____

Solve.

3 How long is the ribbon? Look at the meter stick. _____ centimeters



The meter stick on this page is not life-sized.

4 If you could measure an object using a centimeter ruler or a meter stick, which would you use? Why?

_____

_____

_____

5 Circle the objects that are easier to measure with a centimeter ruler. Underline the objects that are easier to measure with a meter stick.

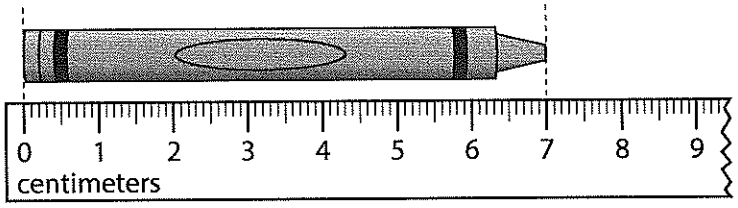
picnic table	crayon
toothbrush	piano
sofa	slice of bread

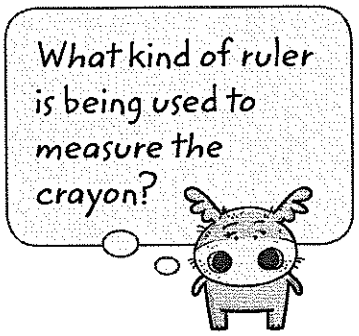
Name: _____

Measure Length

Solve the problems.

1 What is the length of the crayon? Circle the correct answer.





A 7 inches

C 6 centimeters

B 7 centimeters

D 6 inches

Glen chose **A**. This is wrong. How did Glen get his answer?

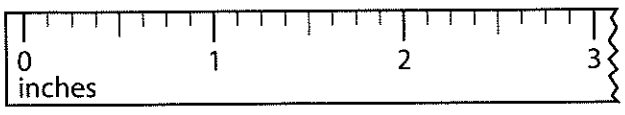
_____

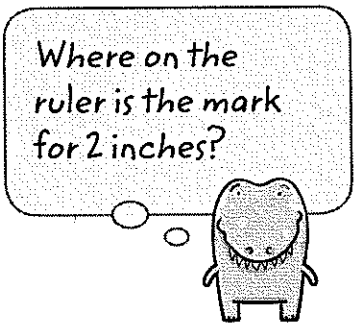
_____

_____

_____

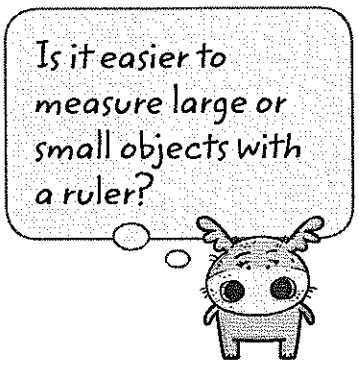
2 Layla started drawing the line above the ruler. Finish drawing the line to make it 2 inches long.





Solve.

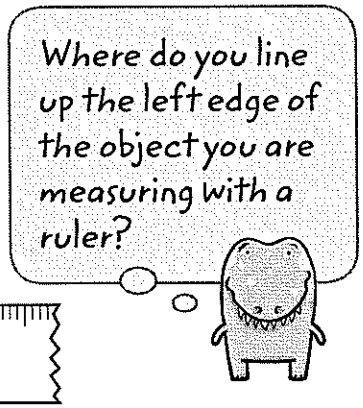
3 Circle the objects that are easier to measure with a centimeter ruler. Underline the objects that are easier to measure with a meter stick.



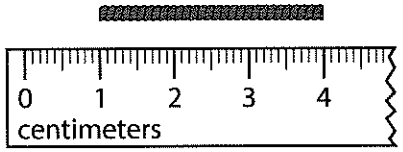
park bench　　stamp

paper clip　　sandbox

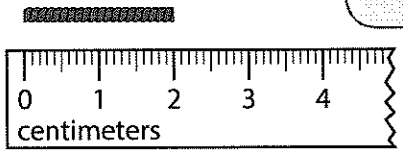
4 Which piece of yarn is 4 centimeters long? Circle the correct answer.



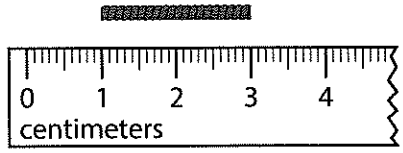
A



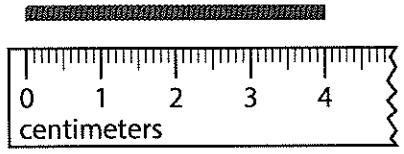
C



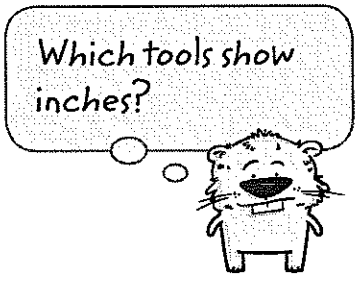
B



D



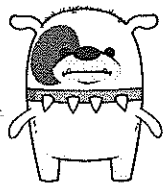
5 Jed wants to measure the length of the classroom chalkboard in inches. Which tool could he use? Circle all the correct answers.



A tape measure　　**C** meter stick

B yardstick　　**D** inch ruler

Name: _____

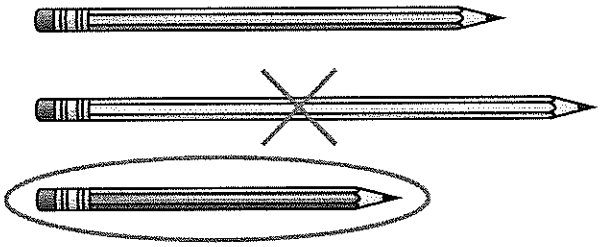


Prerequisite: How do you order objects by length?

Study the example showing how to compare and order objects by length. Then solve Problems 1–8.

Example

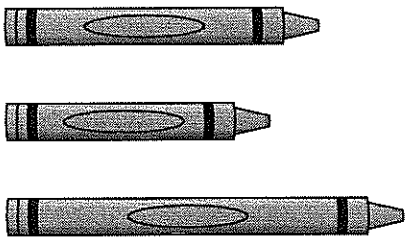
- Circle the shortest pencil.
- Draw an X on the longest pencil.



Circle the word that makes the sentence below true.

The top pencil is **longer** / **shorter** than the middle pencil.

Use the crayons for Problems 1–3.



1. Circle the shortest crayon.

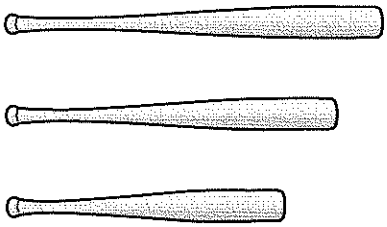
2. Draw an X on the longest crayon.

3. Circle the word that makes the sentence below true.

   The top crayon is **longer / shorter** than the middle crayon.

Solve.

Use the bats for Problems 4–6.



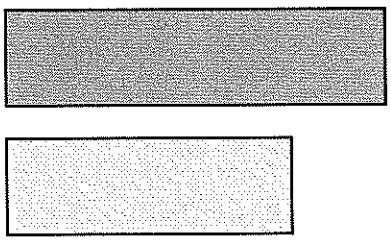
4 Circle the shortest bat.

5 Draw an X on the longest bat.

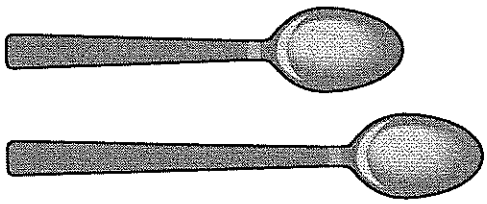
6 Circle the word that makes the sentence below true.

The bottom bat is **longer / shorter** than the middle bat.

7 Draw a line that is longer than both rectangles.



8 Draw a line that is shorter than both spoons.



Name: _____

Use Different Units to Estimate Length

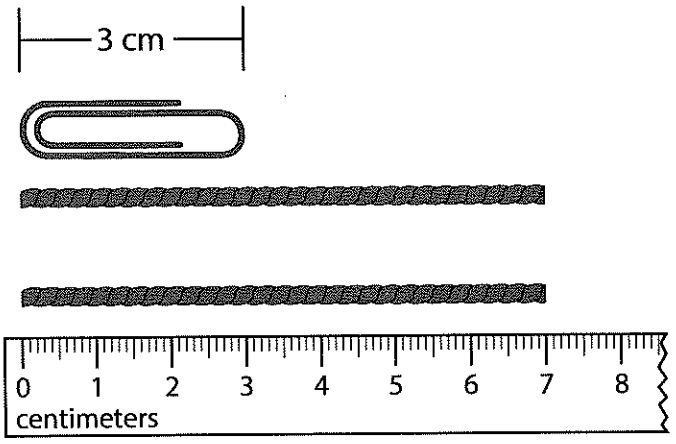
Study the example showing how to estimate length. Then solve Problems 1–8.

Example

Use the paper clip to estimate the length of the yarn.

- It looks like about 2 paper clips would fit above the yarn. **Estimate:** about 6 cm

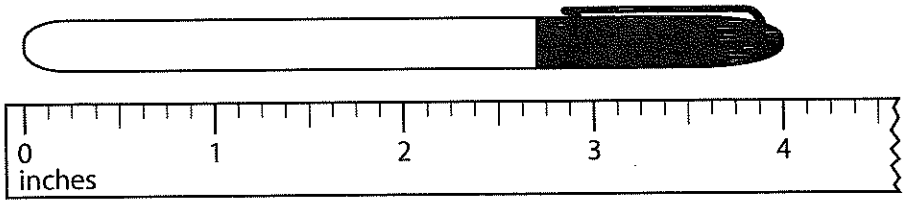
Then use the ruler to measure the actual length of the yarn. **Actual length:** 7 cm



1 Use the eraser to estimate the length of the marker.

The marker is about _____ inches long.

2 Use the ruler to find the actual length of the marker.



What is the actual length?

_____ inches

Vocabulary

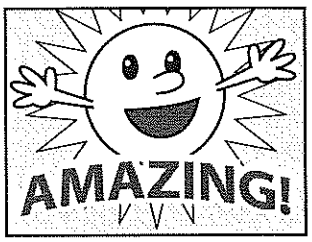
to estimate use math thinking to make a close guess.

estimate a close guess made using math thinking.

Solve.

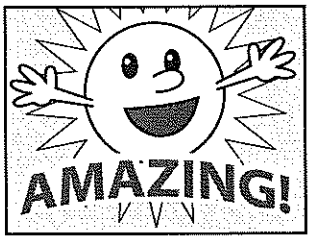
3 Use the width of your little finger to estimate the length of the sticker.

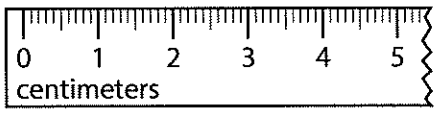
The sticker is about _____ cm long.



4 Use the centimeter ruler to measure the length of the sticker.

What is the actual length? _____ cm





5 Estimate the height of your front door in feet.

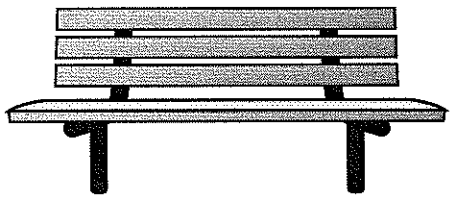
_____ feet

6 Estimate the length of a wall in your home in meters.

_____ meters

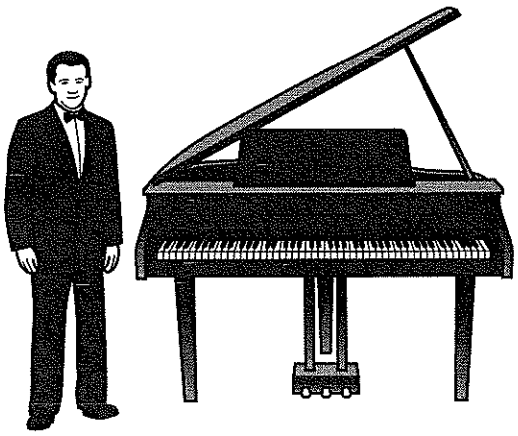
7 Which is the best estimate for the length of a park bench?

10 inches 24 meters 2 yards



8 Which is the best estimate for the length of a piano keyboard?

12 inches 5 feet 20 yards



Name: _____

Reason and Write

Look at the example. Underline a part that you think makes it a good answer.

Example

Mrs. Chen made a list of lengths.

Mrs. Chen's List

Item	Length
unsharpened pencil	19 centimeters
sticky note	3 inches
egg carton	1 foot
height of door	2 meters

A. Choose an object in your home that is not on the list.

B. Estimate the length of the object you chose. Think about an item from Mrs. Chen's list to help you make your estimate.

C. Explain how you made your estimate.

Object: poster Estimate: 3 feet

Explain.

I thought about the egg carton from Mrs. Chen's list. The length of an egg carton is 1 foot. My poster looks as long as about 3 egg cartons. 1 + 1 + 1 = 3, so the poster is about 3 feet long.

Where does the example . . .

- tell the object that was chosen?
- show the estimate?
- explain which item from Mrs. Chen's list was used for help?
- explain how the estimate was made?

Solve the problem. Use what you learned from the example.

Mrs. Chen made a list of lengths.

Mrs. Chen's List

Item	Length
unsharpened pencil	19 centimeters
sticky note	3 inches
egg carton	1 foot
height of door	2 meters

A. Choose an object in your home that is not on the list.

B. Estimate the length of the object you chose. Think about an item from Mrs. Chen's list to help you make your estimate.

C. Explain how you made your estimate.

Object: _____ Estimate: _____

Explain.

_____

_____

_____

_____

_____

_____

Where did you...

- write the object you chose?
- write your estimate?
- explain which item from Mrs. Chen's list you thought about to help you?
- explain how you made your estimate?

Lesson 23

Draw and Use Bar Graphs and Picture Graphs

Name: _____

Prerequisite: Use Picture Graphs

Study the example showing how to use information in picture graphs. Then solve Problems 1–9.

Example

Tess made this picture graph to show the kinds of shoes her friends are wearing. How many friends are wearing sneakers or sandals?

Types of Shoes

Sneakers	☺☺☺☺☺☺☺
Boots	☺☺
Sandals	☺☺☺☺☺

7 friends are wearing sneakers.

5 friends are wearing sandals.

$7 + 5 = 12$

So, 12 friends are wearing sneakers or sandals.

Use the picture graph in the Example to answer the problems below.

1 How many friends are wearing sandals?

_____

2 How many friends are wearing boots?

_____

3 Complete the number sentence to show how many more friends are wearing sandals than boots.

$5 - 2 =$ _____

Vocabulary

picture graph
a way to show data using pictures.

Solve.

Ezra asked his friends if they like to draw with crayons, pencils, or markers best. Then he made this picture graph.

Favorite Drawing Tools

Crayons	☺☺☺☺☺☺
Pencils	☺☺☺☺☺☺☺☺
Markers	☺☺☺

4 How many friends chose pencils? _____

5 How many friends chose markers? _____

6 Complete the number sentence to show how many fewer friends chose markers than pencils.

8 − 3 = _____

7 Write a number sentence to show how many friends chose crayons or markers.

_____ + _____ = _____

8 Do more friends like to draw with crayons or pencils? Circle what more friends like. Then write how many more friends like to draw with that tool.

Crayons

Pencils

_____ more

9 Write another question about the picture graph. Then answer your question.

_____

_____

Name: _____

Use a Picture Graph and Bar Graph

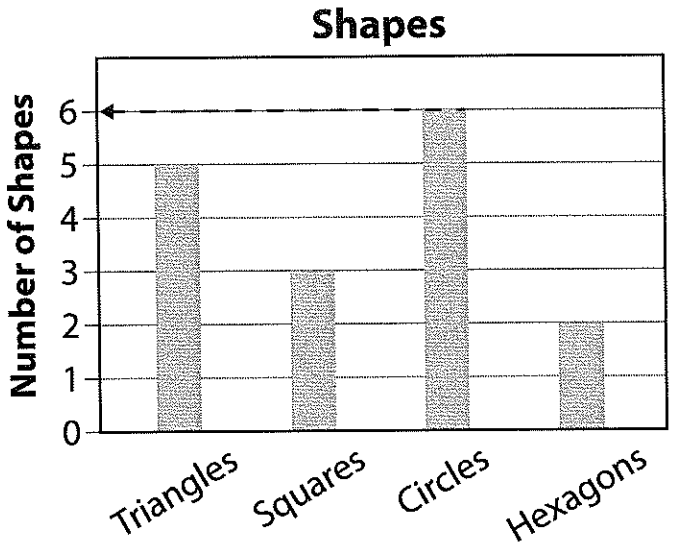
Study the example showing how to use a picture graph and a bar graph. Then solve Problems 1–13.

Example

Val counted the shapes of her stickers. She made a bar graph. How many of her stickers are circles?

The bar for Circles goes up to the line for 6.

Val has 6 circle stickers.



Use the information from the Example to answer Problems 1–4.

1. How many triangles does Val have? _____

2. How many hexagons does Val have? _____

3. Complete the number sentence to show how many more triangles than hexagons Val has.

   5 − _____ = _____

4. Write a number sentence to show how many squares and circles Val has in all.

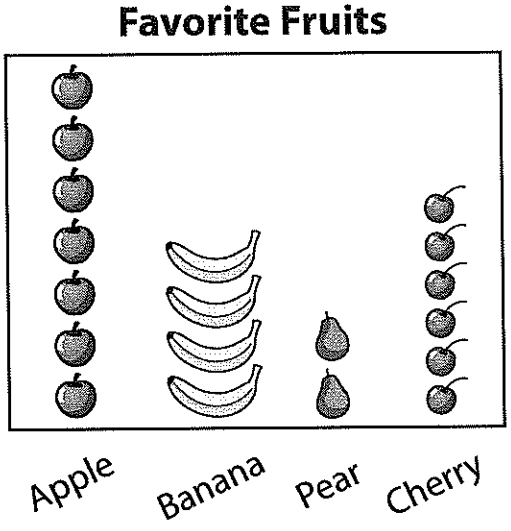
   _____ + _____ = _____

Vocabulary

bar graph a way to show data using bars.

Solve.

Saul asked his friends, "What is your favorite fruit?" Then he made this picture graph.



5 How many friends chose apples? _____

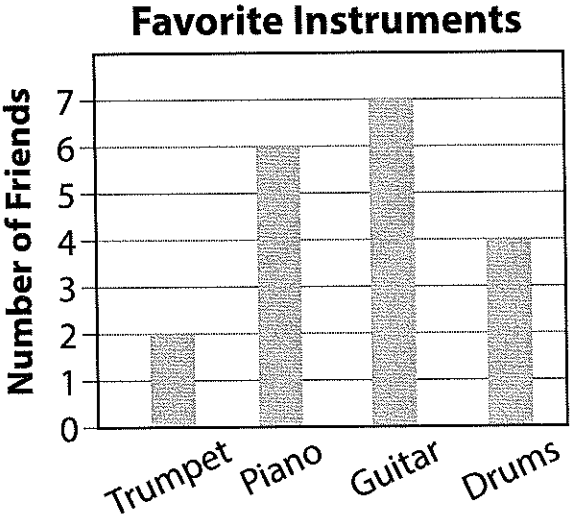
6 How many friends chose pears? _____

7 Complete the number sentence to show how many friends chose apples or pears.

7 + _____ = _____

8 How many fewer friends chose bananas than cherries? _____

Rachel asked her friends, "What is your favorite instrument?" Then she made this bar graph.



9 How many friends chose piano? _____

10 How many friends chose drums? _____

11 How many more friends chose piano than drums? _____

12 How many fewer friends chose trumpet than guitar? _____

13 How many friends did Rachel ask? _____

Name: _____

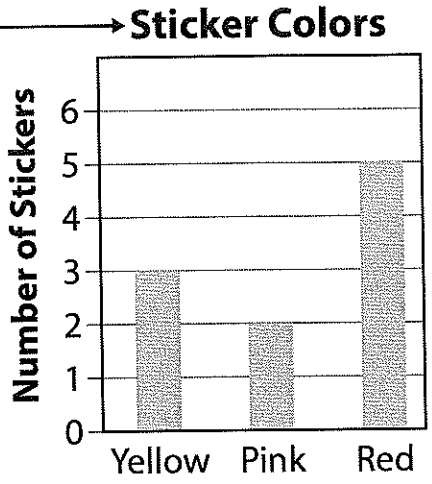
Make Bar Graphs and Picture Graphs

Study the example showing how to make a bar graph from a tally chart. Then solve Problems 1–8.

Example

Ava made the tally chart below to show the colors of heart stickers she has. Then she made the bar graph.

Yellow	Pink	Red
|||	||	𝍸 |



Ava wrote the title of her graph above it.

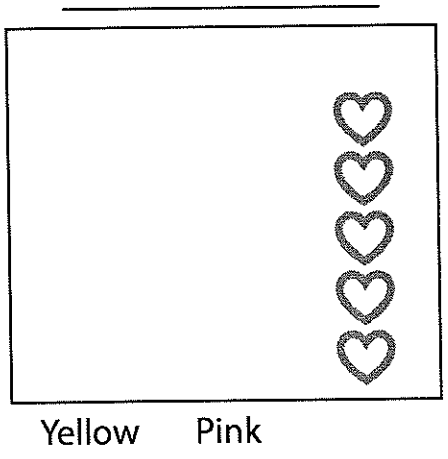
Ava wants to make a picture graph. Use the information in Ava's tally chart for Problems 1–4.

1. Write a title on the line above the graph.

2. Write the missing color name next to Yellow and Pink.

3. Draw the correct number of hearts above the word Yellow.

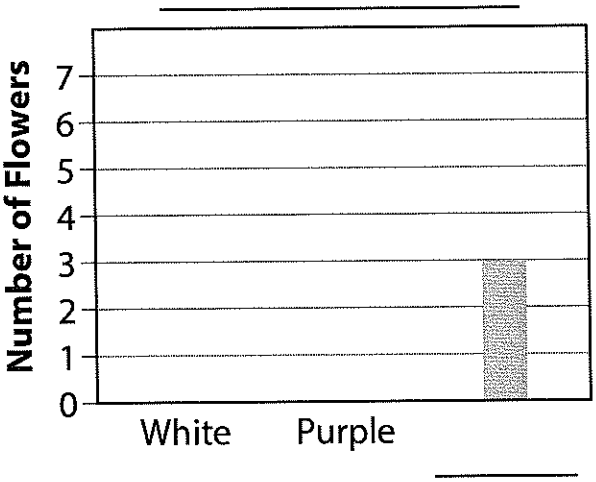
4. Draw the correct number of hearts above the word Pink.



Solve.

Carter made this tally chart to show the colors of flowers in his window box. Use the data in Carter's tally chart to complete the bar graph.

White	Purple	Orange
𝍸	𝍸 |	𝍸



5 What is a good title for the graph? Write it on the line above the graph.

6 Fill in the missing color next to the word Purple.

7 Draw a bar to show how many white flowers there are.

8 Draw a bar to show how many purple flowers there are.

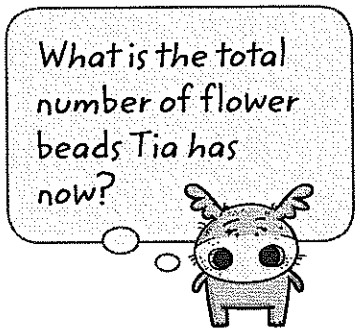
Vocabulary

data a set of collected information.

Name: _____

Solve the problems.

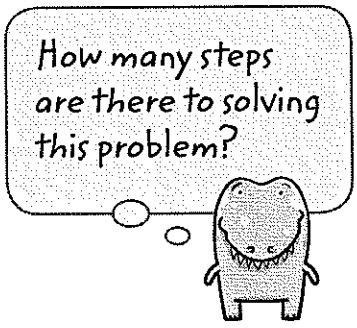
1 Tia makes this picture graph to show the bead shapes in her collection. Then her mom gives her 3 more flower beads. Fill in the graph to show how many flower beads Tia has now.



Bead Shapes

Hearts	♡♡♡♡♡♡♡
Flowers	✿
Moons	☾☾
Stars	☆

2 Use your picture graph from Problem 1 to answer the questions below.



How many more hearts does Tia have than moons and stars combined? Circle the correct answer.

A 5 **C** 3

B 4 **D** 2

Fiona chose **A**. This is wrong. How did Fiona get her answer?

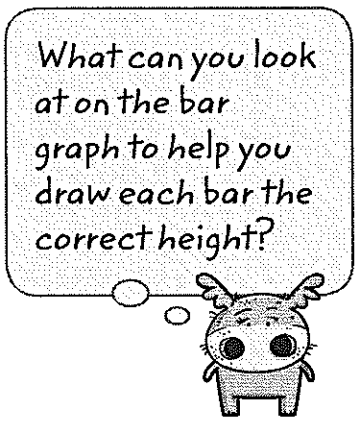
_____

_____

_____

Solve.

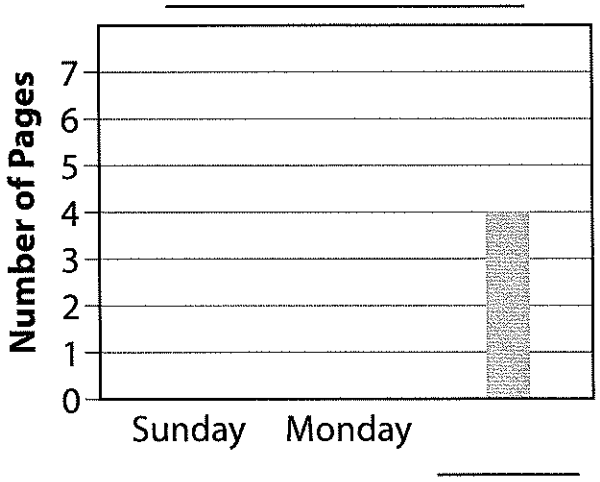
3 Milo recorded the number of journal pages he wrote each day in the tally chart below.



Sunday	Monday	Tuesday
𝍸 |	𝍸	𝍸 ||

Use the tally chart to complete the bar graph.

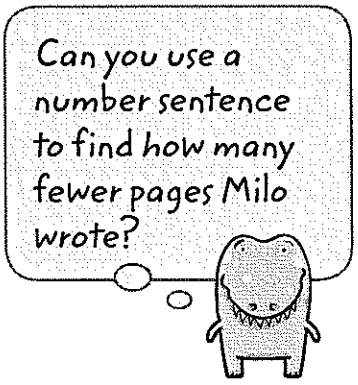
- Draw the two missing bars.
- Write the missing day.
- Give the graph a title.



4 Look at the data in Problem 3.

How many fewer pages did Milo write on Tuesday than on Sunday?

_____



Recognize and Draw Shapes

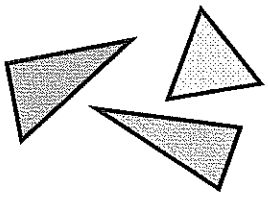
Name: _____

Prerequisite: Use Sides and Corners to Name Shapes

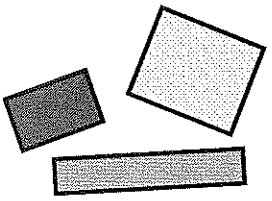
Study the example showing how to name a shape. Then solve Problems 1–3.

Example

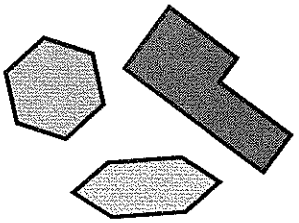
A **triangle** has 3 sides and 3 corners.



A **rectangle** has 4 sides and 4 square corners.

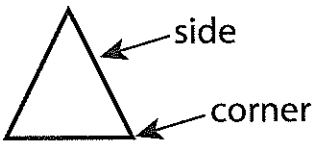


A **hexagon** has 6 sides and 6 corners.



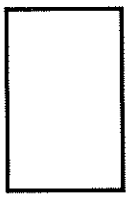
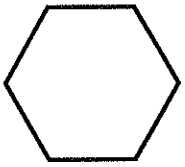
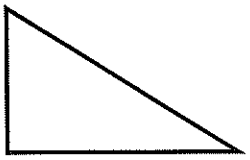
Write the number of sides and corners. Then write the name of the shape.

3 sides
3 corners



triangle

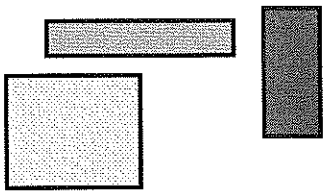
1 Write the number of sides and corners. Then write the name of the shape.

_____ sides _____ square corners	_____ sides _____ corners	_____ sides _____ corners
		
_____	_____	_____

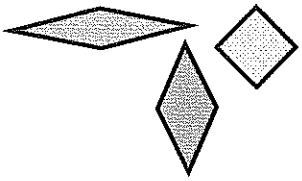
Vocabulary

side a straight line that is part of a shape.

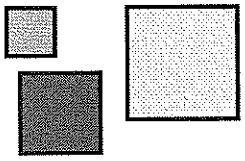
A **rectangle** has 4 sides and 4 square corners.



A **rhombus** has 4 sides the same length and 4 corners.

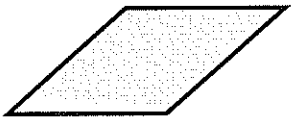


A **square** has 4 sides the same length and 4 square corners.



Solve.

2 Write T in the blank if true. Write F in the blank if false. Then write the name of the shape.

_____ 4 sides the same length _____ 4 square corners	_____ 4 sides the same length _____ 4 square corners	_____ 4 sides the same length _____ 4 square corners
		
_____	_____	_____

3 Bruce says this shape is a square. Do you agree? Why or why not?

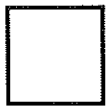
Name: _____

Name and Draw Shapes

Study the example showing how to name shapes and describe shapes. Then solve Problems 1–5.

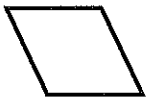
Example

Quadrilaterals have 4 sides and 4 angles.

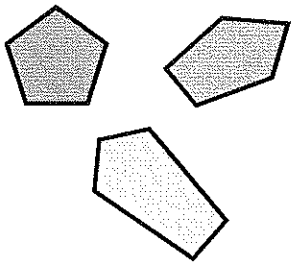

square


rectangle

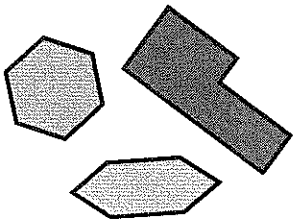

trapezoid


rhombus

Pentagons have 5 sides and 5 angles.



Hexagons have 6 sides and 6 angles.



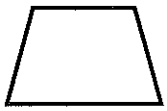
- What is the name of this shape?
- How many sides and angles does it have?

Shape name: rhombus
Number of sides: 4
Number of angles: 4

1 Look at the shapes below. Fill in the chart to name and describe each shape.

Shape A

Shape B



Shape C

Shape	Shape Name	Sides	Angles
A			
B			
C			

Vocabulary

angle the corner where two sides of a shape meet.

Solve.

2 Draw two different shapes that each have 3 sides. Then write the name for shapes with 3 sides.

Shape name: _____

3 Draw two different shapes that each have 6 angles. Then write the name for shapes with 6 angles.

Shape name: _____

4 Draw two different shapes that each have 5 sides. Then write the name for shapes with 5 sides.

Shape name: _____

5 Fill in the blanks. Use the words in the box.

Some
No
All

a. _____ quadrilaterals have 4 sides.

b. _____ quadrilaterals have 5 angles.

c. _____ quadrilaterals have sides the same length.

Name: _____

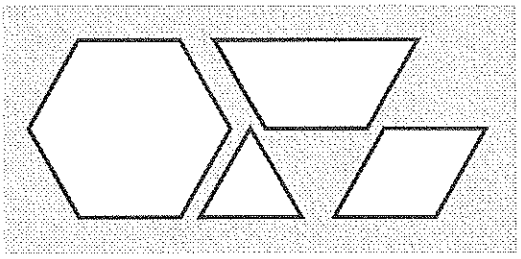
Make Shapes

Study the example showing how to use shapes to make other shapes. Then solve Problems 1–3.

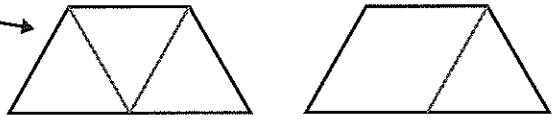
Example

How can you use smaller shapes to make a trapezoid?

Look at the shapes in the green box.

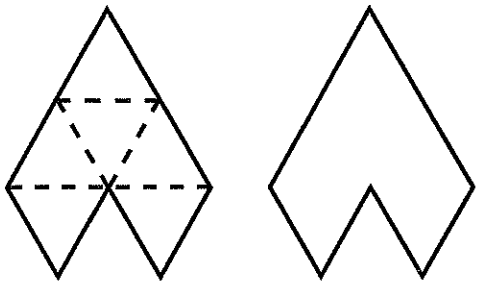


Draw lines to show the shapes you could use.



One Way: 3 triangles
Another Way: 1 rhombus and 1 triangle

1 The dotted lines show one way to make this shape from the smaller shapes. Draw lines to show another way. Then write the names of the shapes you use.

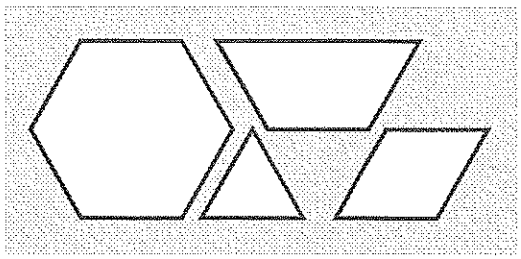


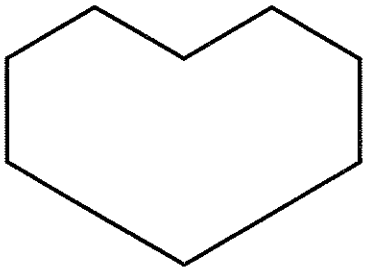
Shape names: _____

_____

Solve.

2 Draw lines to show how you could use shapes from the green box to make this shape. Then write the names of the shapes you use.

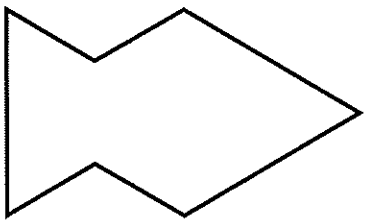




Shapes I used: _____

_____

3 Draw lines to show how you could use shapes from the green box to make this shape. Then write the names of the shapes you use.



Shapes I used: _____

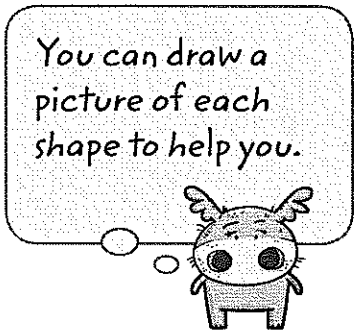
_____

Name: _____

Recognize and Draw Shapes

Solve the problems.

1 Circle *True* or *False* for each sentence.



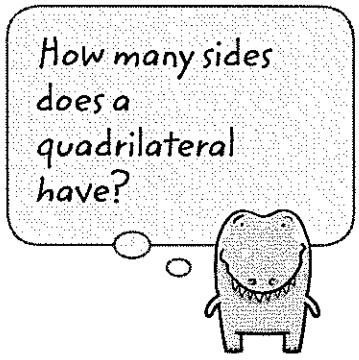
a. All hexagons have 5 angles. True False

b. All squares have 4 equal sides. True False

c. All triangles have 3 equal sides. True False

d. All hexagons have more sides than triangles have. True False

2 Which shape has fewer sides than a quadrilateral? Circle the correct answer.



A pentagon **C** triangle

B hexagon **D** square

Nina chose **D**. This is wrong. Why is it wrong?

_____

_____

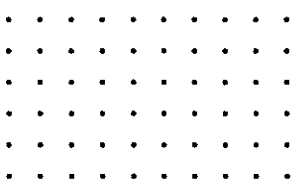
_____

_____

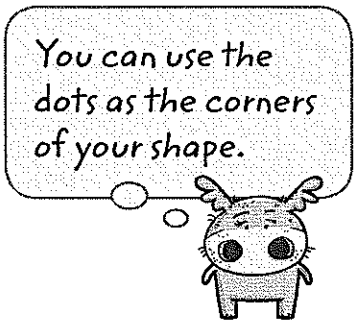
Solve.

3 Draw a shape that has 6 sides. Write the name of the shape. You may use the dots to help you.

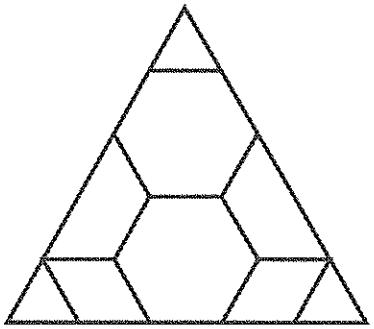
Show your work.



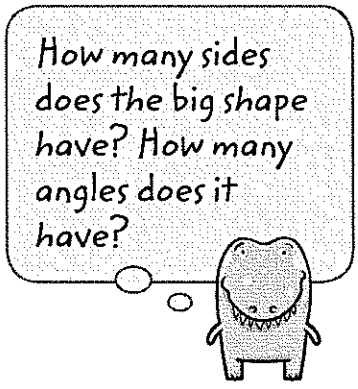
Answer: _____



4 What is the name of the big shape that is made by putting all of the small shapes together? How do you know?



Answer: _____



5 There are 9 smaller shapes that make up the big shape in Problem 4. What are the smaller shapes? Write how many there are of each smaller shape.

_____ triangles _____ pentagons

_____ quadrilaterals _____ hexagons