L Name: _____ Date: _____

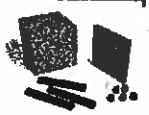
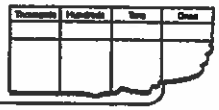
3.1 Solving Problems by Estimating Page 1

Student Book pages 68–69

GOAL

Estimate sums of 2-digit numbers to solve problems.

You will need

- base ten blocks 
- a place value chart 

Problem

Lang wrote a story.

His story has 3 pages.

- Page 1 has 21 words.
- Page 2 has 43 words.
- Page 3 has 45 words.

Did Lang write more than 100 words?

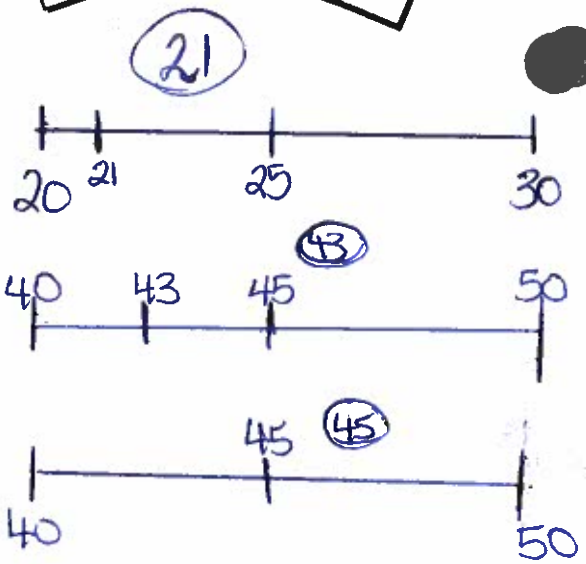
Use base ten blocks to show the number of words on each page.

Hundreds	Tens	Ones
		
		
		

21

43

45



Step 1: Count the tens.

How many tens are there? _____

L Name: _____ Date: _____

3.1 Solving Problems by Estimating Page 2

Step 2: Does Lang need to count the ones to know if he has more than 100 words? _____

How do you know?

_____

_____

Did Lang write more than 100 words? _____

Reflecting

Jodi's story is 2 pages long.

Page 1 has 42 words.

Page 2 has 65 words.

How can Jodi find out if she wrote more than 100 words?

_____

_____

_____

_____

We can take the lowest estimate of 42 + 65

40 + 60 = _____ * the actual will not be smaller than this number

We can take the highest estimate

50 + 70 = _____ * the actual will not be higher than this number

The range between the lowest and highest is :

C&P Name: _____ Date: _____

3.1 Solving Problems by Estimating Page 1

Student Book pages 68–69

GOAL

Estimate sums of 3-digit numbers to solve problems.

You will need

- base ten blocks 
- a place value chart 

Checking

1. Maya wrote a story.

   The first page had 275 words.

   The second page had 250 words.

   Does her story have more than 500 words?

   Step 1: (Circle) the kind of answer you need: exact estimate

   How do you know?

   _____

   _____

   Step 2: Model 275 and 250 with base ten blocks.

   Draw your models in the place value chart.

Number	Hundreds	Tens	Ones
275			
250			

   Did Maya write more than 500 words? _____

   How do you know?

   lowest estimate: 200 + 200 = ____

   highest estimate: 300 + 300 = ____

C&P Name: _____ Date: _____

3.1 Solving Problems by Estimating Page 2

Practising

4. Your school has $800 to spend on a computer and a printer.
The computer costs $575.
The printer costs $275.
Does your school have enough money?

Step 1: (Circle) the kind of answer you need: exact estimate

Step 2: Estimate 575 + 275.
Model the numbers using base ten blocks.
Draw your models.

Number	Hundreds	Tens	Ones
575			
275			

Does your school have enough money? _____
How do you know?

_____

_____

lowest 500 + 200 =
highest 600 + 300 =

Name: _____ Date: _____

Chapter 3 Lesson 1

Solving Problems by Estimating

GOAL

Estimate sums of 3-digit numbers to solve problems.

check

a) 298 + 105

b) 202 + 298

c) 96 + 53

d) 161 + 288

1. Use mental math to calculate the first sum. Use that sum to estimate the next sum.

a) 300 + 100 = _____, so 298 + 105 = about _____

b) 200 + 300 = _____, so 202 + 298 = about _____

c) 100 + 50 = _____, so 96 + 53 = about _____

d) 150 + 300 = _____, so 161 + 288 = about _____

2. Estimate each sum. Show your work.

a) 249 + 199 is about _____

b) 96 + 402 is about _____

c) 353 + 47 is about _____

d) 208 + 297 is about _____

3. Cole's father saved $600 for furniture. He wants to buy a rug for $277 and a lamp for $303. Does he have enough money? Show your work.

check

277 + 303

_____ + _____ = 600

4. Kate made 200 brownies. She needs 145 brownies for a bake sale, and she needs 48 brownies for her class at school. Did she make enough brownies?

check

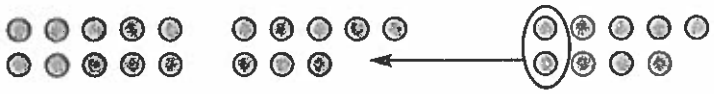
145 + 48

_____ + _____ = 200

Adding Mentally

Goal **Use mental math strategies to add 2-digit numbers.**

1. Move counters to make the addition easier. Then write the answer.



18 + 9 = _____

2. Use mental addition.

a) 20 + 30 = _____

b) 50 + 20 = _____

c) 19 + 31 = _____

d) 18 + 32 = _____

e) 49 + 21 = _____

3. Use mental math to solve these problems.

a) There are 38 students in Mrs. Jones's classroom and 23 students in Mr. Singh's classroom.

How many students are there altogether? _____

b) Payden has 48 cents and Jill has 22 cents.

How much money do they have altogether? _____

c) Avis is 19. Her grandmother is 58 years older.

How old is Avis's grandmother? _____

d) There are 37 cans on one shelf and 43 on another.

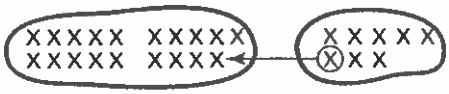
How many cans are there altogether? _____

e) There are 28 large paper clips and 38 small paper clips.

How many paper clips are there altogether? _____

At-Home Help

Moving counters from one group to another can sometimes make adding easier.



19 + 8

20 + 7

+1

19 + 8 = 20 + 7
= 27

Name: _____ Date: _____

Try These

1. Circle the best estimate. Explain how you estimated.

		possible estimates		
a)	21 + 33	50	60	70
b)	48 + 46	80	90	100
c)	37 + 25	50	60	70

20 + 30

20 + 30 = 50 or 30 + 40 =

40 + 40 = or

30 + 20 = or

2. Estimate each sum.
Show the numbers you used to estimate.

a) 32 + 41 is about _____.

b) 17 + 58 is about _____.

c) 29 + 36 is about _____.

3. Arya uses a 100 chart to add 27 + 28.
He adds 28 in parts by adding 20
and then adding 8.
To add 20, go down 2 rows.
To add 8, go forwards 8 or
go down 1 row (that's + 10)
and then back 2 (that's − 2).
Use the 100 chart to add.
Use a different colour for each addition.

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

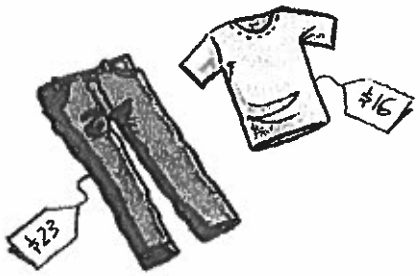
a) 22 + 11 = _____ c) 24 + 69 = _____

b) 63 + 33 = _____ d) 78 + 17 = _____

Name:_____ Date:_____

4. What is the total cost?

a)

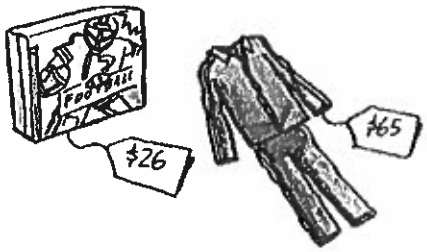


16 + 23 = □

16 + 20 = ___

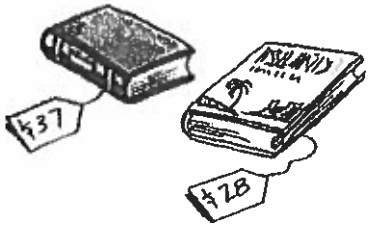
20 + 23 = ___

b)



26 + 65 = □

c)



37 + 2x = ___

5. Show 2 ways to complete each addition.

a) 48 + 7

48 + 10=	50 + 7=

50 + 10 = 60

b) 67 + 24

67 + 20	70 + 24

70 + 20 = 90

Estimating Sums

Name _____

Estimate the sum by rounding to the nearest 100.

943 + 588 = ▩

Round each number to the nearest 100.

943 rounds to 900

588 rounds to 600

Add the rounded numbers.

$$\begin{array}{r} 900 \\ +\ 600 \\ \hline 1\,500 \end{array}$$

Estimate by rounding to the nearest 100.

1. $\begin{array}{r} 564 \\ +328 \\ \hline \end{array}$ $\begin{array}{r} 600 \\ +300 \\ \hline 900 \end{array}$

2. $\begin{array}{r} 832 \\ +489 \\ \hline \end{array}$ + _____

3. $\begin{array}{r} 614 \\ +207 \\ \hline \end{array}$ + _____

4. $\begin{array}{r} 426 \\ +295 \\ \hline \end{array}$ + _____

5. $\begin{array}{r} 783 \\ +424 \\ \hline \end{array}$ + _____

6. $\begin{array}{r} 372 \\ +658 \\ \hline \end{array}$ + _____

7. $\begin{array}{r} 949 \\ +508 \\ \hline \end{array}$ + _____

8. $\begin{array}{r} 872 \\ +\ 29 \\ \hline \end{array}$ + _____

9. $\begin{array}{r} 649 \\ +887 \\ \hline \end{array}$ + _____

10. $\begin{array}{r} 703 \\ +\ 89 \\ \hline \end{array}$ + _____

11. $\begin{array}{r} 289 \\ +397 \\ \hline \end{array}$ + _____

12. $\begin{array}{r} 506 \\ +450 \\ \hline \end{array}$ + _____

13. $\begin{array}{r} 918 \\ +626 \\ \hline \end{array}$ + _____

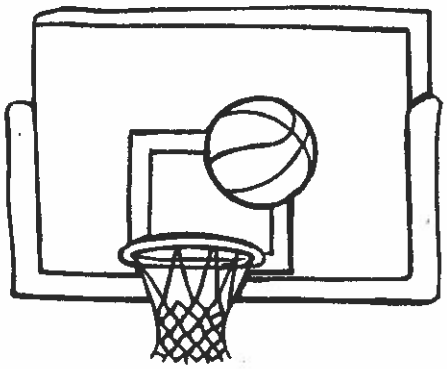
14. $\begin{array}{r} 774 \\ +\ 29 \\ \hline \end{array}$ + _____

15. $\begin{array}{r} 468 \\ +982 \\ \hline \end{array}$ + 1

Addition: Regrouping

Addition means "putting together" or adding two or more numbers to find the sum. For example, 3 + 5 = 8. To regroup is to use ten ones to form one ten, ten tens to form one 100, and so on.

Directions: Add using regrouping.



Example:

Add the ones.

$$\begin{array}{r} 88 \\ +21 \\ \hline 9 \end{array}$$

Add the tens with regrouping.

$$\begin{array}{r} 88 \\ +21 \\ \hline 109 \end{array}$$

Round

37	40	56		51		37		70	
+72	+70	+67	+	+88	+	+55	+	+68	+

93		47		81		23		36	
+54	+	+82	+	+77	+	+92	+	+71	+

92 + 13 = ____ 73 + 83 = ____ 54 + 61 = ____

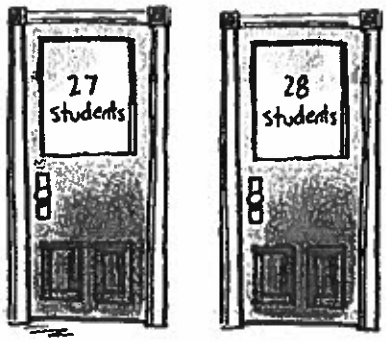
The Blues scored 63 points. The Reds scored 44 points. How many points were scored in all? _____

Name:_____ Date:_____

Adding Two-Digit Numbers

Pathway 2 GUIDED

You can add 27 + 28 to find out the number of students in 2 classes.



You will need

- base ten blocks
- place value charts (tens, ones)
- number lines
- 100 charts

- To add 27 + 28, estimate first:
  27 + 28 is close to 25 + 25, or 50.
  Your answer should be about 50.
  You could also estimate using 30 + 30.

- You can add by modelling with base ten blocks. Count the number of each kind of block and do any trading you have to.

	T	O
	2	7
+	2	8
	4	15

There are 4 tens and 15 ones.
Trade 10 ones for 1 ten.
That's 5 tens and 5 ones, or 55.

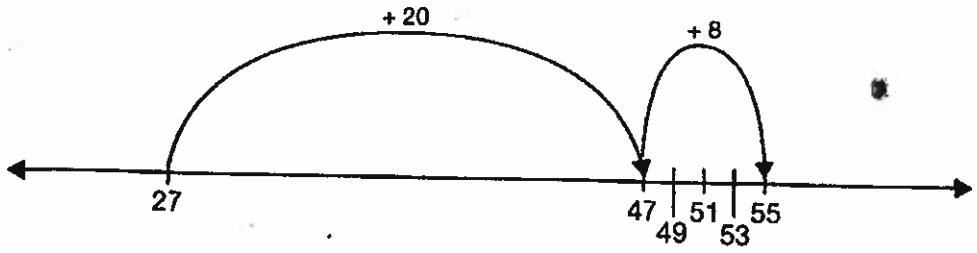
Remember

- When you combine numbers, you should combine tens with tens and ones with ones.

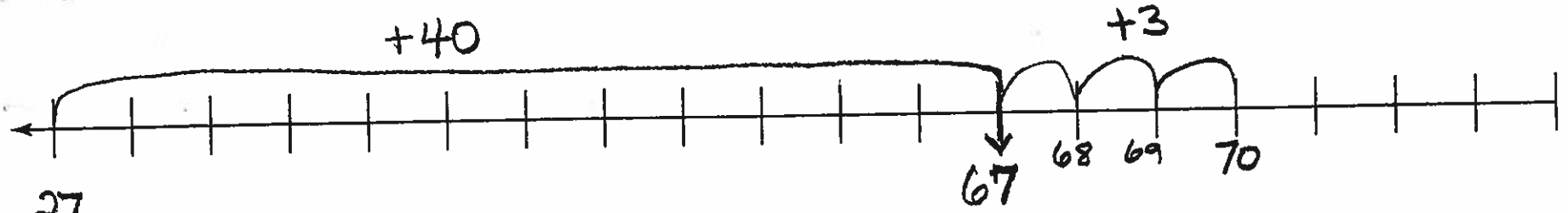
- You can record addition in different ways.

$$\begin{array}{r} 27 \\ +\ 28 \\ \hline 40 \\ +\ 15 \\ \hline 55 \end{array} \quad \text{or} \quad \begin{array}{r} 27 \\ +\ 28 \\ \hline 15 \\ +\ 40 \\ \hline 55 \end{array} \quad \text{or} \quad \begin{array}{r} {\scriptstyle 1} \\ 27 \\ +\ 28 \\ \hline 55 \end{array}$$

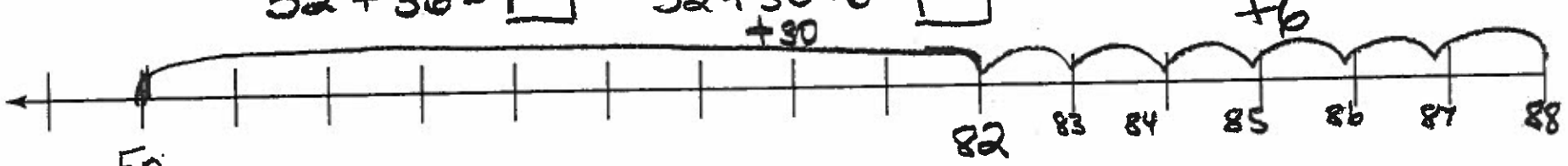
- You can add in parts.
  You can add 28 by adding 20, then 8.



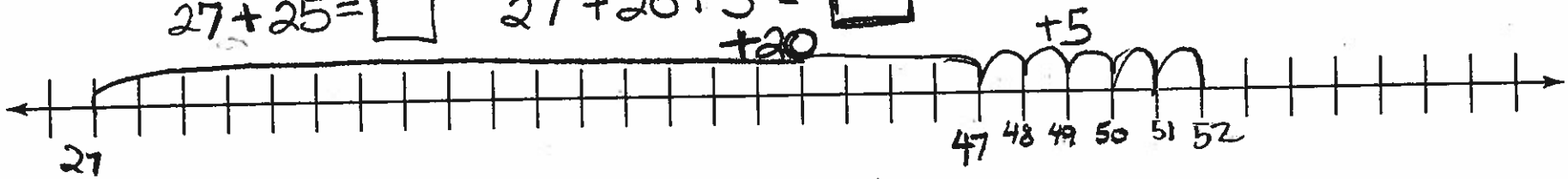
We can rename $27+43=\square$ as $27+40+3=\square$ using a number line



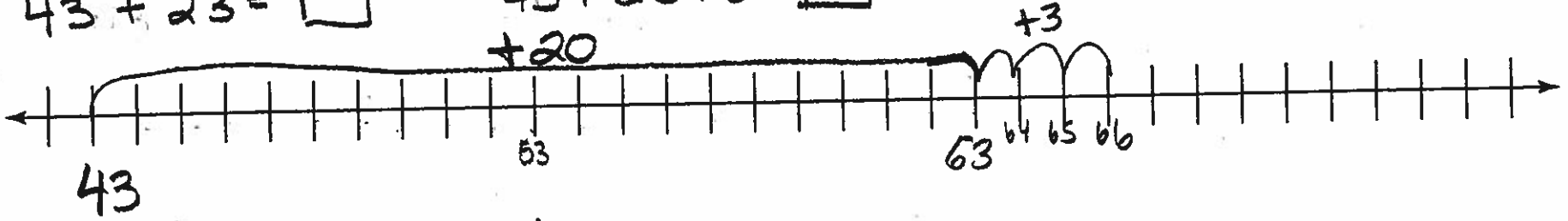
$52+36=\square$ $52+30+6=\square$



$27+25=\square$ $27+20+5=\square$



$43+23=\square$ $43+20+3=\square$



Do one of your own!

Name: _____ Date: _____

Chapter 3 Lesson 2

Estimating Sums

GOAL

Estimate sums in different ways.

1. Estimate each sum. Show your work.

a) 210 + 499 is about

_____

b) 589 + 308 is about

_____

c) 1072 + 994 is about

_____

d) 3987 + 2001 is about

_____

At-Home Help

Here are some ways to estimate sums.

- Use base ten blocks or counters to model the problem.
- Use a number line to model the problem.
- Estimate by adding the closer hundreds or thousands (e.g., 1130 is closer to 1000 than 2000).

2. Estimate each sum. Show your work.

a) 510 + 203 + 696 is about _____

b) 1080 + 5098 + 2900 is about _____

c) 929 + 1100 + 997 is about _____

d) 2033 + 1002 + 1977 is about _____

e) 3172 + 3030 + 2960 is about _____

f) 1072 + 2908 + 3978 is about _____

3. Jade wants to collect 8000 pennies, or $80. She has a jar with 1048 pennies, a jar with 2083 pennies, and a jar with 3992 pennies. Does Jade have enough pennies? How do you know?

_____

Estimating Sums

Goal **Estimate sums by rounding.**

At-Home Help

You can use **rounded numbers** to **estimate a sum** (the answer when you add).

3859 + 1321

close to 4000 close to 1000

The sum is about
4000 + 1000 = 5000.

1. Estimate. Show your rounded numbers.

a) 1867 + 913 is about equal to

_____

b) 3611 + 1489 is about equal to

_____

c) 1156 + 2722 is about equal to

_____

d) 999 + 1999 is about equal to

_____

2. Estimate the answers to these problems. Show your rounded numbers.

a) Jack's mother drove 1245 km on Saturday and 985 km on Sunday. About how many kilometres did she drive on those 2 days?

b) 4856 people live in one town. 3345 live in another town. About how many people live in the 2 towns?

3. Use rounded numbers to find whether $5000 is enough to buy both items in each part. Check your answers using a calculator.

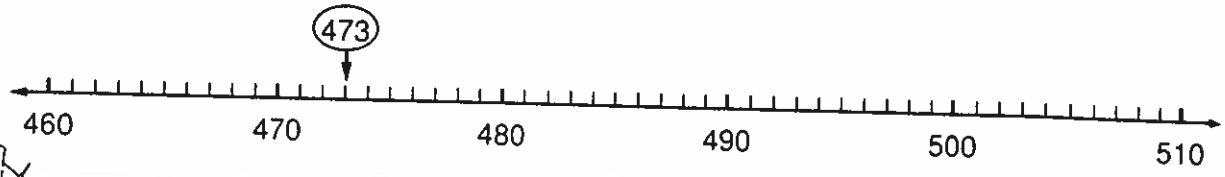
a)

b)

Rounding Numbers

Name _____

Round 473 to the nearest 10.



Think: the closest multiples of 10 are 470 and 480.

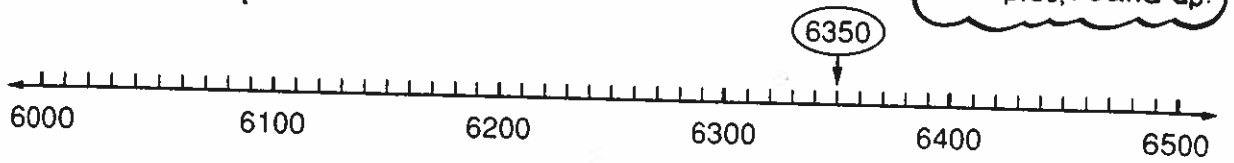
473 is closer to 470.

473 rounded to the nearest 10 is 470.

Use the number lines to complete the sentences.

Round 6350 to the nearest 100.

1.



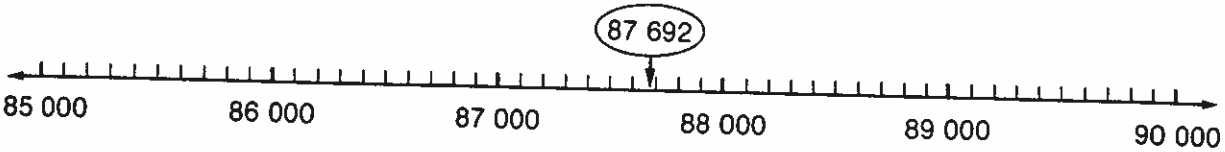
Think: the closest multiples of 100 are _____ and _____.

6350 is halfway between _____ and _____.

6350 rounded to the nearest 100 is _____.

Round 87 692 to the nearest 1000.

2.



Think: the closest multiples of 1000 are _____ and _____.

87 692 is closer to _____.

87 692 rounded to the nearest 1000 is _____.

Round the numbers. Use the number lines above if you wish.

3. 497 to the nearest 10 _____

4. 6420 to the nearest 100 _____

5. 6180 to the nearest 100 _____

6. 89 500 to the nearest 1000 _____

Multiples of 10, 100, and 1000

Name _____

Count by 10. Write the multiples of 10 between 20 and 130.

A multiple of 10 is a number whose last digit is 0.

30, 40, 50, 60, 70, 80, 90, 100, 110, 120

Complete.

A multiple of 100 is a number whose last 2 digits are 0.

1. Count by 100. Write the multiples of 100 between 600 and 1500.

700, ____, 900, ____, ____, ____, 1300, ____

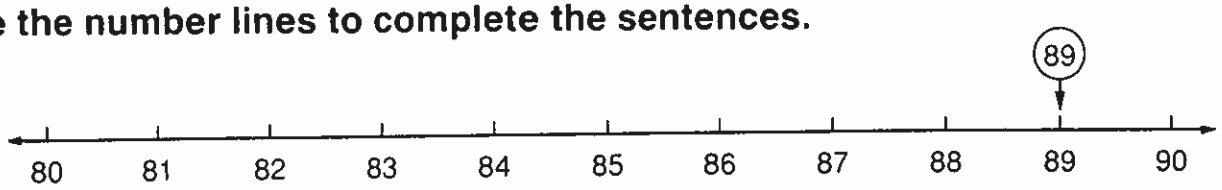
A multiple of 1000 is a number whose last 3 digits are 0.

2. Count by 1000. Write the multiples of 1000 between 53 000 and 59 000.

54 000, ____, 56 000, ____, ____, ____

Use the number lines to complete the sentences.

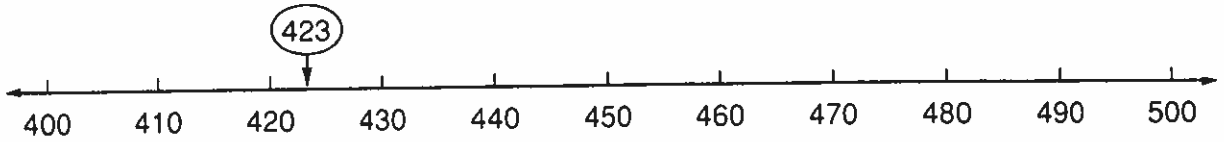
3.



The multiples of 10 on the number line are ____ and ____.

The multiple of 10 closer to 89 is ____.

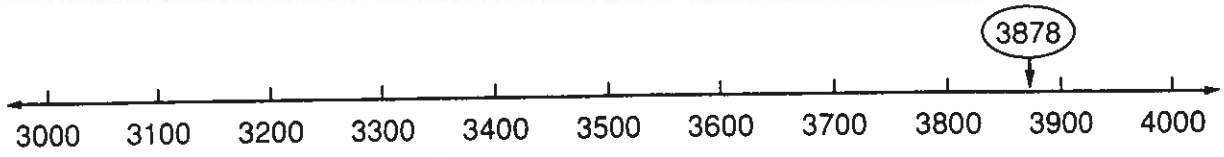
4.



The multiples of 100 on the number line are ____ and ____.

The multiple of 100 closer to 423 is ____.

5.



The multiples of 1000 on the number line are ____ and ____.

The multiple of 1000 closer to 3878 is ____.

L Name: _____ Date: _____

3.2 Estimating Sums Page 1

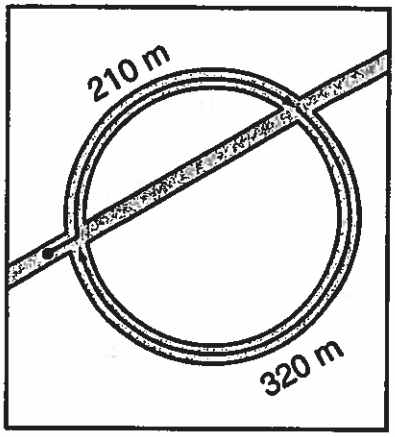
Student Book pages 70–72

GOAL

Estimate sums in different ways.

Problem

Aneela plans to run the route shown at the right.



About how far will Aneela run?

Use two ways to estimate.

Estimate by adding the hundreds

Write the numbers in the place value chart.

The first one is done for you.

Number	Hundreds	Tens	Ones
210	2	1	0
320			

Circle the hundreds.

Add the circled hundreds.

_____ + _____ = _____

Aneela will run about _____ m.

L Name: _____ Date: _____

3.2 Estimating Sums Page 2

Estimate using a number line

Step 1: Find 210 on the number line.

200 is the closer hundred.

Step 2: 310 is close to 300.

Start at 200 and jump 300 m.

Aneela will run about _____ m.

Reflecting

How would you estimate 280 + 190?

_____

_____

_____

_____

What other ways can you use to estimate sums?

_____

_____

_____

_____

C&P Name: _____ Date: _____

3.2 Estimating Sums Page 1

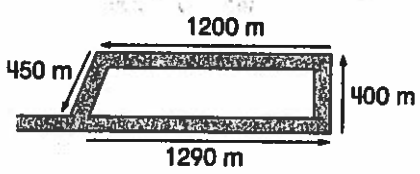
Student Book pages 70–72

GOAL

Estimate sums in different ways.

Checking

1. Kate plans to run the route shown at the right.



Estimate how far she will run by adding the thousands.

Write the numbers in the place value chart.
The first one is done for you.

Number	Thousands	Hundreds	Tens	Ones
400	0	4	0	0
1290				
450				
1200				

Circle the thousands.
Add the circled thousands.

_____ + _____ = _____

Kate will run about _____ m.

Explain one other way you could estimate how far Kate will run.

_____

_____

_____

_____

C&P Name: _____ Date: _____

3.2 Estimating Sums Page 2

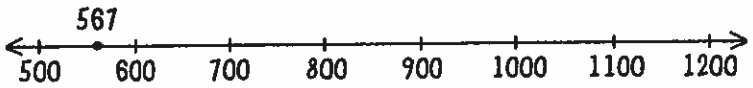
Practising

2. Estimate.

a) 567 + 513

Add the closer hundreds using the number line.

Record all your jumps.



567 + 513 is about _____.

4. The chart shows the number of people who went to a 3-day folk festival.

Estimate the total attendance.

Day	Attendance
Thursday	899
Friday	1799
Saturday	2375

Circle the closer hundreds.

800 **899** 900

1700 **1799** 1800

2300 **2375** 2400

Add the circled numbers.

_____ + _____ + _____ = _____

About how many people attended the festival? _____

Name: _____ Date: _____

Chapter 3 Lesson 2

Estimating Sums

GOAL

Estimate sums in different ways.

1. Estimate each sum. Show your work.

a) 210 + 499 is about 700

200 + 500 = 700 or 210 + 500 = 710

b) 589 + 308 is about

_____

c) 1072 + 994 is about

_____

d) 3987 + 2001 is about

_____

At-Home Help

Here are some ways to estimate sums.

- Use base ten blocks or counters to model the problem.
- Use a number line to model the problem.
- Estimate by adding the closer hundreds or thousands (e.g., 1130 is closer to 1000 than 2000).

2. Estimate each sum. Show your work.

a) 510 + 203 + 696 is about 500 + 200 + 700 = ____

b) 1080 + 5098 + 2900 is about _____

c) 929 + 1100 + 997 is about _____

d) 2033 + 1002 + 1977 is about _____

e) 3172 + 3030 + 2960 is about _____

f) 1072 + 2908 + 3978 is about _____

3. Jade wants to collect 8000 pennies, or $80. She has a jar with 1048 pennies, a jar with 2083 pennies, and a jar with 3992 pennies. Does Jade have enough pennies? How do you know?

1048 + 2083 + 3992 =

1000 + 2000 + 4000 =

Estimating Sums

Goal **Estimate sums by rounding.**

At-Home Help

You can use **rounded numbers** to **estimate a sum** (the answer when you add).

3859 + 1321

close to 4000 close to 1000

The sum is about 4000 + 1000 = 5000.

1. Estimate. Show your rounded numbers.

a) 1867 + 913 is about equal to

_____

b) 3611 + 1489 is about equal to

_____

c) 1156 + 2722 is about equal to

_____

d) 999 + 1999 is about equal to

_____

2. Estimate the answers to these problems. Show your rounded numbers.

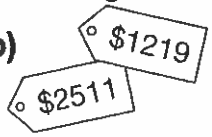
a) Jack's mother drove 1245 km on Saturday and 985 km on Sunday. About how many kilometres did she drive on those 2 days?

b) 4856 people live in one town. 3345 live in another town. About how many people live in the 2 towns?

3. Use rounded numbers to find whether $5000 is enough to buy both items in each part. Check your answers using a calculator.

a)

b)



L Name: _____ Date: _____

3.3 Exploring Addition and Subtraction

Student Book page 73

GOAL

Use your own strategies to add and subtract numbers to solve a problem.

Problem

Jade made jingle dresses for a powwow with her mother and sister.
They folded 100 pieces of metal into cones.
They sewed the cones onto 3 dresses.

How many cones were sewn on the mother's jingle dress?

Use base ten blocks.

Step 1: Model 100 using 9 tens blocks and 10 ones blocks. Draw your model.

Hundreds	Tens	Ones

Step 2: Subtract the number of cones on the sister's jingle dress. To subtract 16, take away 1 ten and 6 ones. Draw your model.

Hundreds	Tens	Ones

Step 3: Subtract the number of cones on Jade's jingle dress. To subtract 32, take away 3 tens and 2 ones. Draw your model.

Hundreds	Tens	Ones

Step 4: Count the blocks that are left.

There are _____ cones on the mother's jingle dress.

C&P Name: _____ Date: _____

3.3 Exploring Addition and Subtraction

Student Book page 73

GOAL

Use your own strategies to add and subtract numbers to solve a problem.

Jade made jingle dresses for a powwow with her mother and sister.

They folded 1000 metal lids into cones.

They sewed the cones onto 3 dresses.

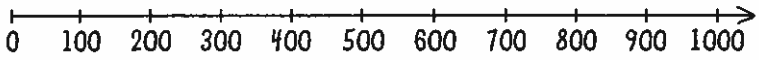
199 cones

299 cones

▒ cones

How can you calculate the number of cones on the mother's jingle dress?

Use a number line.



Step 1: Start at 1000 because there are 1000 cones in total.

Subtract the number of cones on the sister's dress.

Rename 199 as 200 − 1.

Subtract 200 now and add the 1 later.

Step 2: Subtract the number of cones on Jade's jingle dress.

Rename 299 as 300 – 1.

Subtract 300 now and add the 1 later.

Step 3: Add the 2 cones.

How many cones are on the mother's jingle dress? _____

What other strategies could you use to solve the problem?

_____

_____

_____

Chapter 5 Lesson 3

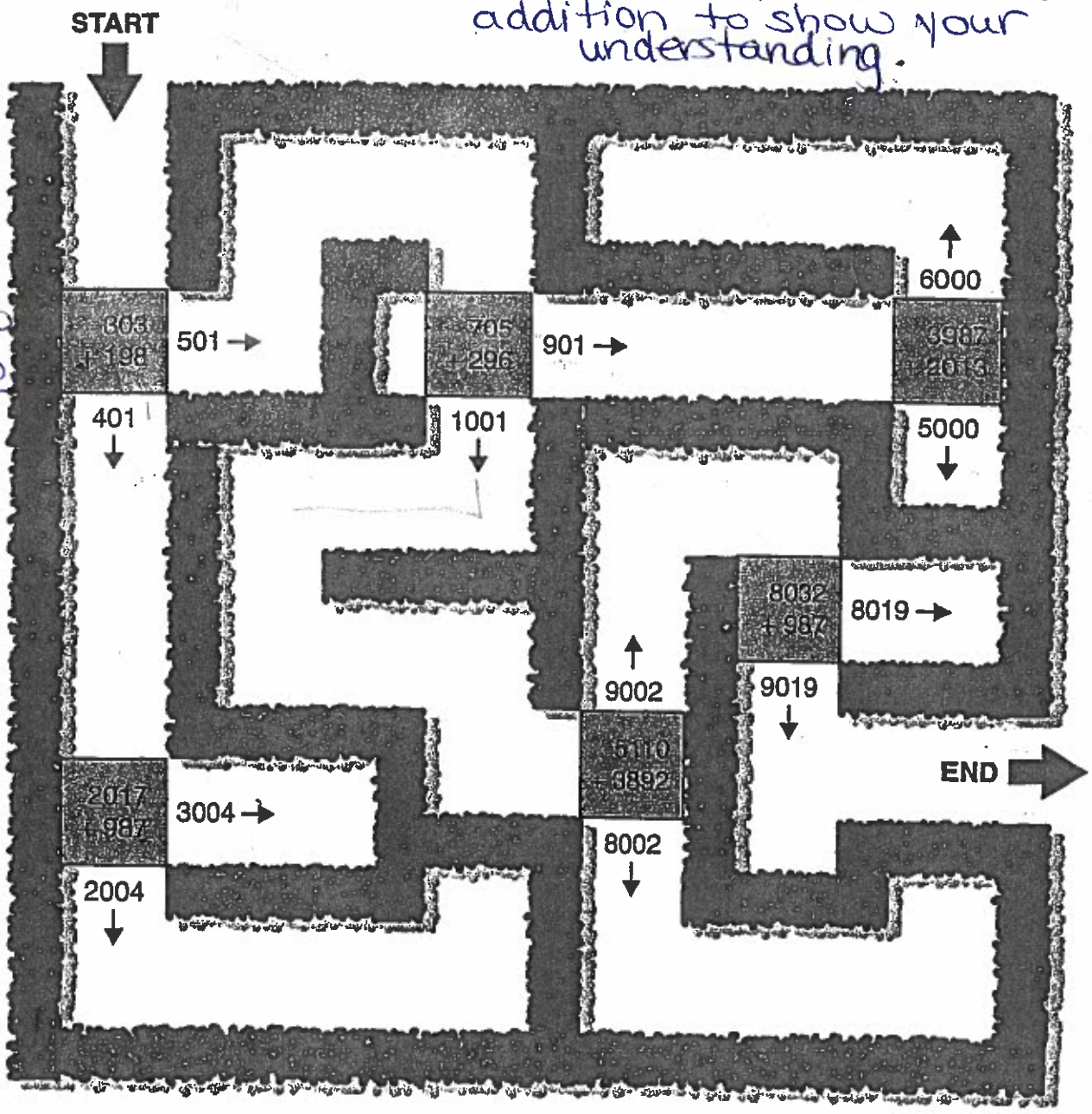
Name: _____ Date: _____

Exploring Addition and Subtraction

GOAL

Use your own strategies to add and subtract numbers to solve a problem.

Start at the beginning of the maze. When you come to a sum, solve it. Follow the correct answer. Can you reach the end? Write the rounded addition to show your understanding.



ex
300
+200

Communicate About Number Concepts and Procedures

Goal **Explain your thinking when estimating a sum.**

1. Is each answer reasonable? Explain.

   a) 1899 + 976 = 2875 _____

   _____

   b) 4521 + 2589 = 7110 _____

   _____

   _____

   c) 3464 + 1987 = 7451 _____

   _____

   _____

   d) 1569 + 3750 = 4319 _____

   _____

   e) 3122 + 3179 = 6301 _____

   _____

At-Home Help

Estimation can help you to find out if an answer is **reasonable**.

6332

This answer to 2567 + 3765 is reasonable because 2000 + 3000 = 5000 and 3000 + 4000 = 7000. The answer should be between 5000 and 7000.

2. Use a calculator to solve each problem.
   Explain why your answer is reasonable.

   a) 1517 tickets were sold for blue seats at a hockey game.
   3567 tickets were sold for red seats.
   How many tickets were sold altogether? _____

   _____

   b) 5245 children's tickets were sold for a circus.
   2345 adult tickets were sold.
   How many tickets were sold altogether? _____

   _____

L Name: _____ Date: _____

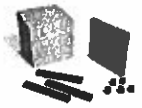
3.4 Adding from Left to Right Page 1

Student Book pages 74–76

GOAL

Solve addition problems by adding from left to right.

You will need

- base ten blocks 
- a place value chart 

Problem

A forklift operator wants to lift 3 containers.

The forklift can safely lift up to 400 kg.

Can the forklift safely lift all 3 containers?

Use base ten blocks.

Step 1: Model each number with base ten blocks.

Draw your models.

Hundreds	Tens	Ones	
			212
			123
			54

L Name: _____ Date: _____

3.4 Adding from Left to Right Page 2

Step 2: Add the hundreds.

200 + _____ + _____ = _____

Step 3: Add the tens.

10 + _____ + _____ = _____

Step 4: Add the ones.

2 + _____ + _____ = _____

Step 5: Add the hundreds, tens, and ones.

_____ + _____ + _____ = _____

Can the forklift safely lift all 3 containers? _____

How do you know?

_____

_____

Reflecting

How could you have predicted whether the forklift could safely lift all 3 containers?

_____

_____

_____

_____

C&P Name: _____ Date: _____

3.4 Adding from Left to Right Page 1

Student Book pages 74–76

GOAL

Solve addition problems by adding from left to right.

Checking

1. A forklift can lift 8000 kg safely.

The operator needs to lift 3 containers.

- Container 1 has a mass of 2455 kg.
- Container 2 has a mass of 849 kg.
- Container 3 has a mass of 4567 kg.

Can the 3 containers be lifted safely?

Step 1: Write the masses in the place value chart.

This Step has been done for you.

Mass		Thousands	Hundreds	Tens	Ones
2455		2			
849		0			
4567	+	4			
		6			
	+				

Step 2: Add from left to right. Write the totals in the table.

The thousands have been done for you.

C&P Name: _____ Date: _____

3.4 Adding from Left to Right Page 2

a) Can the forklift lift all 3 containers? _____

How do you know?

_____

_____

b) Did you estimate to solve the problem or did you calculate an exact answer?

_____

_____

Explain.

_____

_____

Practising

6. Add from left to right.

a)

	1	2	5	9
+		6	1	8
+				

b)

	6	9	6	3
+	2	3	6	4
+				

Name: _____ Date: _____

Chapter 3 Lesson 4

Adding from Left to Right

GOAL

Solve addition problems by adding from left to right.

1. Add from left to right. Show your work.

a)

	1	3	1	1
+		6	4	5

b)

	2	4	1	5
+	3	2	2	1

c)

	6	2	2	4
+	1	7	6	8

d)

	5	0	6	7
+	3	6	2	1

e)

	4	1	1	1
+	1	7	0	3

f)

	1	1	4	3
+		2	5	1
		4	0	2

At-Home Help

Follow these steps to add from left to right.

Step 1 Add the thousands.

Step 2 Add the hundreds.

Step 3 Add the tens.

Step 4 Add the ones.

Step 5 Add them all together to calculate the sum.

For example:

```
  1246
+ 2934
------
  3000   (thousands)
  1100   (hundreds)
    70   (tens)
+   10   (ones)
------
  4180
```

Name: _____ Date: _____

Scaffolding for Lesson 4, Questions 3 & 6

STUDENT BOOK PAGE 76

6. Calculate. Show your work.
Some of the steps are done for you.

a)

	1	2	5	9	
+		6	1	8	
	1	0	0	0	
		8	0	0	
+					

b)

	6	9	6	3	
+	2	3	6	4	
	8	0	0	0	
	1	2	0	0	
+					

c)

	4	2	1	1	
		3	4	5	
+		9	6	7	
	4	0	0	0	
		1	1	0	
+					

d)

	1	5	6	7	
	1	5	7	8	
+	2	5	6	7	
	4	0	0	0	
+					

L Name: _____ Date: _____

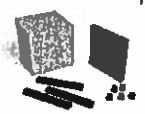
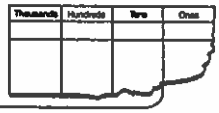
3.5 Adding From Right to Left Page 1

Student Book pages 78–80

GOAL

Solve addition problems by adding from right to left.

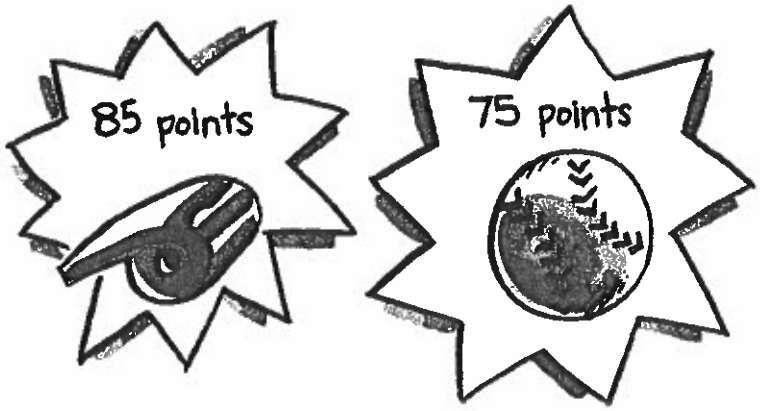
You will need

- base ten blocks 
- a place value chart 

Problem

Aneela's school collects food labels to get points.

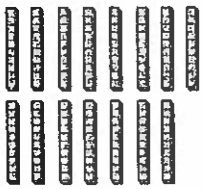
They can trade the points for school equipment.

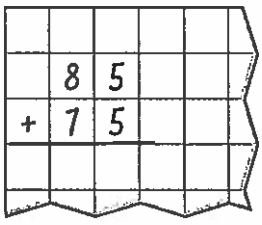


How many points does Aneela's school need for the whistle and baseball?

Use base ten blocks.

Step 1: Model the numbers with base ten blocks.

Hundreds	Tens	Ones
		



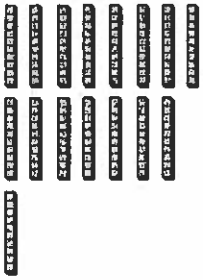
Step 2: Add the ones.

_____ + _____ = _____

L Name: _____ Date: _____

3.5 Adding From Right to Left Page 2

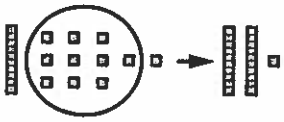
Step 3: Regroup the ones. Add a ten.

Hundreds	Tens	Ones
		

	1		
	8	5	
+	7	5	
		0	

regroup

Trade 10 smaller units for 1 larger unit, or 1 larger unit for 10 smaller units



Step 4: Add the tens.

_____ + _____ + _____ = _____

Step 5: Regroup the tens. Add a hundred.

Hundreds	Tens	Ones
		

Step 6: Add the blocks.

_____ + _____ + _____ = _____

Aneela's school needs _____ points.

Reflecting

How do you know when to regroup when you are adding from right to left?

_____

_____

_____

_____

C&P Name: _____ Date: _____

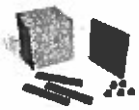
3.5 Adding from Right to Left Page 1

Student Book pages 78–80

GOAL

Solve addition problems by adding from right to left.

You will need

- base ten blocks 
- a place value chart 

Checking

1. A school wants to use points to get 3 books.

This table shows how many points the school needs to get each book.

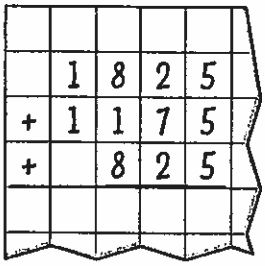
Day	Number of points needed
Sports book	1825
Astronomy book	1175
Dinosaur book	825

How many points does the school need?

Step 1: Model the points needed for each book using base ten blocks.

Draw your models in the place value chart.

Thousands	Hundreds	Tens	Ones



Step 2: Add the ones.

Do you need to regroup? _____

Step 3: Add the tens.

Do you need to regroup? _____

C&P Name: _____ Date: _____

3.5 Adding from Right to Left Page 2

Step 4: Add the hundreds.

Do you need to regroup? _____

Step 5: Add the thousands.

Do you need to regroup? _____

How many points does the school need? _____

Practising

2. An online discussion group has a goal of 7500 postings.

The table shows how many postings it had.

Month	Number of postings
January	1535
February	2865
March	3145

Did the group reach its goal? _____

Add the numbers of postings from right to left.

+				
+				

~~Do you need to regroup? _____~~

Did the group reach its goal? _____

Name: _____ Date: _____

Chapter 3 Lesson 5

Adding from Right to Left

GOAL

Solve addition problems by adding from right to left.

1. Add from right to left. Show your work.

a)

	1	2	2	5
+		4	3	1

c)

	4	0	7	2
+	3	7	2	4

b)

	1	7	6	0
+	1	2	4	8

d)

	8	6	4	3
+		6	4	8

2. Jade's mother saved $3966 this year. Next year, she plans to save $2992. Will she have enough money to buy a car that costs $7000?

3. In September, Joshua's website had 227 visits. In October, it had 2143 visits. In November, it had 2324 visits. Has the number of visitors reached 5000?

At-Home Help

You can **regroup** by trading 10 smaller units for 1 larger unit, or 1 larger unit for 10 smaller units. Follow these steps to add from right to left.

Step 1 Add the ones. If the answer is 10 or more, regroup.

Step 2 Add the tens. If the answer is 100 or more, regroup.

Step 3 Add the hundreds. If the answer is 1000 or more, regroup.

Step 4 Add the thousands.

For example:

$$\begin{array}{r} {\scriptstyle 1\ 1\ \ \ } \\ 3762 \\ +\ 1942 \\ \hline 5704 \end{array}$$

Adding 4-Digit Numbers

Goal **Solve addition problems using regrouping.**

1. Complete the addition by writing in the spaces in the place value chart.

a)

Thousands	Hundreds	Tens	Ones
		1	
2	7	3	2
2	8	6	9
			1

b)

Thousands	Hundreds	Tens	Ones
2	7	3	8
6	4	3	9
		7	

At-Home Help

You can add two 4-digit numbers by **regrouping**.

2539 + 1866

Thousands	Hundreds	Tens	Ones
1	1	1	
2	5	3	9
1	8	6	6
4	4	0	5

$$\begin{array}{r} {\scriptstyle 1\,1\,1} \\ 2539 \\ +\ 1866 \\ \hline 4405 \end{array}$$

The answer seems reasonable because 3000 + 2000 = 5000 and the answer is close to 5000.

2. Estimate the sum. Then add.

a) $\begin{array}{r} 3988 \\ +\ 2246 \\ \hline \end{array}$

b) $\begin{array}{r} 3254 \\ +\ 862 \\ \hline \end{array}$

c) $\begin{array}{r} 4310 \\ +\ 3859 \\ \hline \end{array}$

3. Estimate. Then solve.

a) There are 3456 Girl Guides in one area and 1672 in another area. What is the total number of Girl Guides in both areas?

b) There are 1867 Wolf Cubs in one area and 4306 in another area. What is the total number of Wolf Cubs in both areas?