Outcomes of chapter four :

At the end of chapter four, your child will be able to:

▶ **Lessons 1 & 2 :**
- Participate in calendar math activities.
- Explain the commutative property of addition.
- Apply mental math strategies to solve addition and subtraction problems.

▶ **Lesson 3 :**
- Participate in calendar math activities.
- Decompose a 2-digit number into tens and ones.

▶ **Lesson 4 :**
- Participate in calendar math activities.
- Add two 2-digit numbers without regrouping.
- Decompose 2-digit numbers to solve addition story problems.

▶ **Lesson 5 :**
- Participate in calendar math activities.
- Subtract 2-digit numbers without regrouping.
- Decompose 2-digit numbers to solve subtraction story problems.

▶ **Lesson 6 :**
- Participate in calendar math activities.
- Use place value to estimate sums and differences.
- Solve 2-digit addition and subtraction problems without regrouping.

▶ **Lesson 7 :**
- Participate in calendar math activities.
- Decompose 2-digit numbers to solve addition story problems.
- Use place value to estimate sums.

▶ **Lessons 8 & 9 :**
- Participate in calendar math activities.
- Decompose 2-digit numbers to solve addition problems.
- Mentally calculate sums of two 1-digit numbers.
- Solve 2-digit addition problems with and without regrouping.
- Model regrouping using pictures or manipulatives.

▶ **Lesson 10 :**
- Participate in calendar math activities.
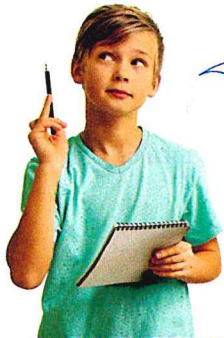- Collaborate to add four 2-digit numbers.

• Commutative property in addition
• More of mental applications on adding and subtracting

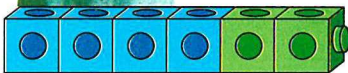## Learn 1 Commutative property in addition

You can add in any order and the sum is the same.
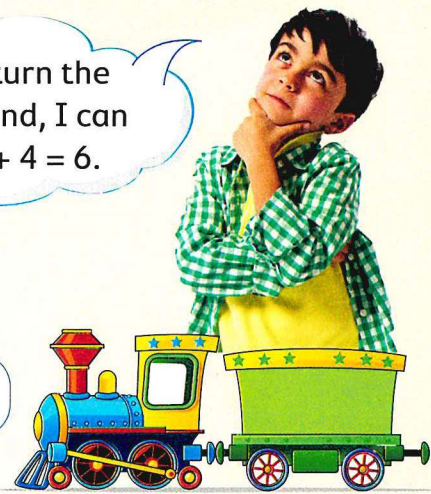
I write $4 + 2 = 6$ for this train.

When I turn the train around, I can write $2 + 4 = 6$.

$$4 + 2 = 6$$

$$2 + 4 = 6$$

Then the addition is commutative.

Check

Find the sum. The first one is done for you.

$3 + 8 = \underline{11}$	$3 + 9 = \underline{\quad}$	$1 + 8 = \underline{\quad}$
$8 + 3 = \underline{11}$	$9 + 3 = \underline{\quad}$	$8 + 1 = \underline{\quad}$

5	3	5	4	6	2
+ 3	+ 5	+ 4	+ 5	+ 2	+ 6
___	___	___	___	___	___

7	11	12	3	10	7
+ 11	+ 7	+ 3	+ 12	+ 7	+ 10
___	___	___	___	___	___

Notes for parents
• Ask your child to use small cubes to show 6 + 3 and 3 + 6 , and then ask him/her to tell you why the two sums are the same.

Learn 2 Mental applications on adding and subtracting

Use count on to add

What is 5 + 24 ?

Start at 24.

Then count on 5 more.

25 , 26 , 27 , 28 , 29

The sum is 29.

Then : [5 + 24 = **29**]

Use count back to subtract

What is 43 − 6 ?

Start at 43.

Then count back 6.

42 , 41 , 40 , 39 , 38 , 37

The difference is 37.

Then : [43 − 6 = **37**]

Check

Count on to find the sum.

5 3 + 7 = _____

9 + 1 4 = _____

8 + 6 1 = _____

2 0 + 6 = _____

5 + 8 7 = _____

Count back to find the difference.

3 1 − 1 = _____

2 6 − 5 = _____

4 4 − 9 = _____

1 3 − 7 = _____

6 0 − 2 = _____

• Help your child add by count on starting with the greater number because it is easier than starting with the smaller number.

- Commutative property in addition
- More of mental applications on adding and subtracting

📖 From the school book

1 Complete.

a. 7 + 8 = 8 + ____

b. 7 + 4 = 4 + ____

c. ____ + 5 = 5 + 3

d. 8 + 4 = ____ + 8

e. 5 + 15 = 15 + ____

f. 30 + ____ = 9 + 30

2 Color the addition sentences in each row that have the same sum.

a. 13 + 5   12 + 5   5 + 13

b. 4 + 16   16 + 4   15 + 4

c. 7 + 17   7 + 16   16 + 7

d. 13 + 3   13 + 2   2 + 13

3 Add.

a.
```
    8        5
  + 5      + 8
  ___      ___
```

b.
```
    3        7
  + 7      + 3
  ___      ___
```

c.
```
    9        4
  + 4      + 9
  ___      ___
```

d.
```
   14        3
  + 3      + 14
  ___      ___
```

e.
```
   17        2
  + 2      + 17
  ___      ___
```

f.
```
   11        8
  + 8      + 11
  ___      ___
```

4 Find the sum. Then rewrite the problems by switching the addends and solve it. The first one is done for you.

a. 3 + 15 = _18_ ➡ _15_ + _3_ = _18_

b. 📖 8 + 9 = _____ ➡ _____ + _____ = _____

c. 📖 14 + 4 = _____ ➡ _____ + _____ = _____

d. 📖 9 + 15 = _____ ➡ _____ + _____ = _____

e. 6 + 18 = _____ ➡ _____ + _____ = _____

f. 📖 12 + 8 = _____ ➡ _____ + _____ = _____

---

5 Add.

a.	64	b.	39	c.	72	d.	14	e.	83
	+ 8		+ 5		+ 9		+ 6		+ 7

f.	55	g.	28	h.	47	i.	91	j.	59
	+ 4		+ 3		+ 6		+ 7		+ 2

---

6 Subtract.

a.	53	b.	61	c.	77	d.	16	e.	20
	− 8		− 3		− 9		− 7		− 4

f.	31	g.	46	h.	82	i.	84	j.	62
	− 2		− 8		− 5		− 6		− 3

7 Find the result.

a. 35 + 7 = ——

b. 72 + 8 = ——

c. 42 + 6 = ——

d. 28 + 7 = ——

e. 37 + 7 = ——

f. 15 + 8 = ——

g. 32 + 5 = ——

h. 24 + 6 = ——

i. 59 + 6 = ——

j. 63 + 9 = ——

k. 87 + 4 = ——

l. 48 + 8 = ——

m. 45 − 8 = ——

n. 24 − 7 = ——

o. 32 − 5 = ——

p. 19 − 3 = ——

q. 23 − 4 = ——

r. 15 − 9 = ——

s. 61 − 2 = ——

t. 34 − 7 = ——

u. 22 − 8 = ——

v. 56 − 8 = ——

w. 47 − 9 = ——

x. 71 − 6 = ——

8 Put (✓) to the correct statement or (✗) to the incorrect statement.

a. 35 + 8 = 42   (   )

b. 7 + 8 = 8 + 7   (   )

c. 43 − 7 = 26   (   )

d. 52 − 3 = 49   (   )

e. 9 + 5 = 10 + 4   (   )

f. 25 + 9 = 33   (   )

g. 72 + 7 = 77   (   )

h. 18 − 9 = 9   (   )

i. 8 + 3 > 3 + 8   (   )

j. 42 − 6 = 36   (   )

k. 28 − 9 = 21   (   )

l. 70 + 1 = 80   (   )

m. 63 − 4 = 59   (   )

n. 23 + 8 < 51 − 17   (   )
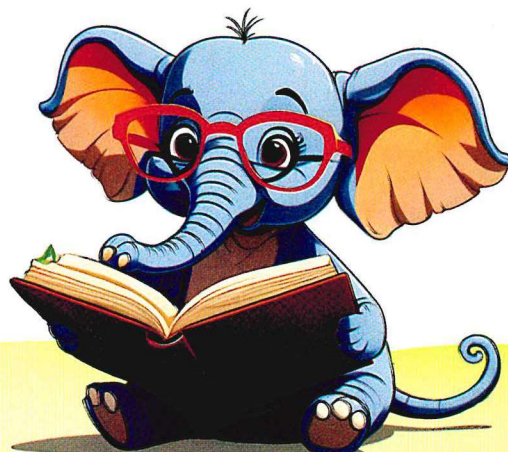
Place a smiley face
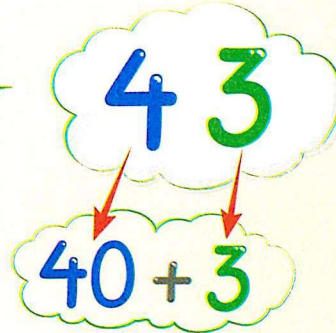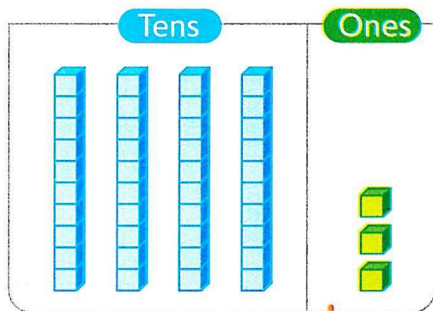
Decomposing numbers into ones and tens

Learn **How to decompose a 2-digit number ?**

Decompose a 2-digit number means writing it as sum of tens and ones.

Tens   Ones

4 3

40 + 3

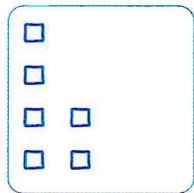*The digit 4 is in the tens place. This means 4 has a value of 40.*

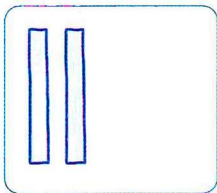*The digit 3 is in the ones place. This means 3 has a value of 3.*

Check

Decompose the numbers. The first one is done for you.

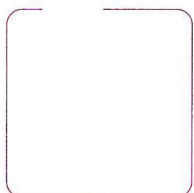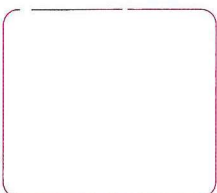**26**   20 + 6

59   ___ + ___

71   ___ + ___

Notes for parents

• Give your child a number of objects, such as paper clips (fewer than 100). Ask your child to put them in groups of tens and ones and tell you how many there are in all.

1 Circle what is the value of the blue digit.

a.

36

(60 or 6)

b.

57

(5 or 50)

c.

40

(40 or 4)

d.

73

(30 or 3)

e.

26

(2 or 20)

f.

61

(1 or 10)

g.

71

(70 or 7)

h.

67

(60 or 6)

i.

14

(10 or 1)

j.

54

(50 or 5)

k.

84

(4 or 40)

l.

51

(1 or 10)

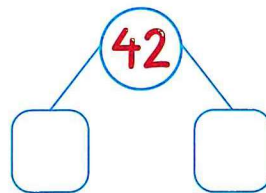**2** 📖 Decompose each number in two ways. Draw sticks to show Tens and dots to show Ones. Then write the Tens and Ones in the number boxes.

a.

Tens	Ones

42

b.

Tens	Ones

37

c.

Tens	Ones

56

d.

Tens	Ones

22

e.

Tens	Ones

62

f.

Tens	Ones

85
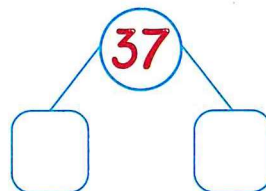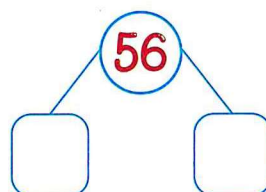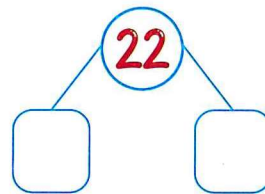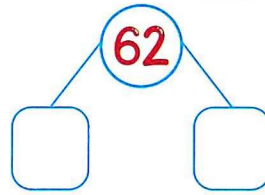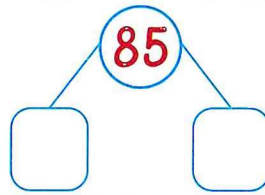
3 Choose the correct answer.

a. 40 + 2 = —— (42 or 24 or 14)

b. 90 + 5 = —— (59 or 509 or 95)

c. 6 + 70 = —— (670 or 76 or 67)

d. 50 + 1 = —— (501 or 51 or 15)

e. 9 + 10 = —— (910 or 91 or 19)

f. 30 + 8 = —— (38 or 83 or 308)

g. 70 + —— = 72 (2 or 20 or 22)

h. —— + 5 = 35 (3 or 30 or 300)

i. 7 + —— = 87 (8 or 80 or 800)

4 Match.

a. 50 + 4   45

b. 79   90 + 7

c. 97   68

d. 5 + 40   54

e. 60 + 8   70 + 9

Place a smiley face

115

Adding without regrouping

Learn

• **How to add** 52 + 37 ?

First way

Decompose by drawing sticks for tens and small squares for ones for each addend to add.

52 + 37 = 89

Tens	Ones

Tens	Ones

Tens	Ones
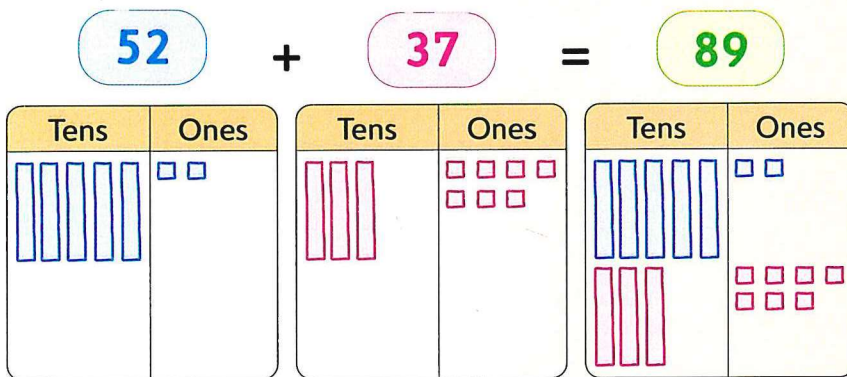
I added the ones
2 + 7 = 9
I added the tens
50 + 30 = 80

How many in all ?
80 + 9 = 89
So, 52 + 37 = 89

Second way

Decompose each addend into tens and ones to add.

52 + 37 = 89

50 + 2 + 30 + 7 = 80 + 9
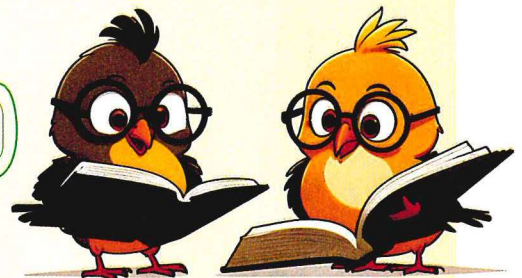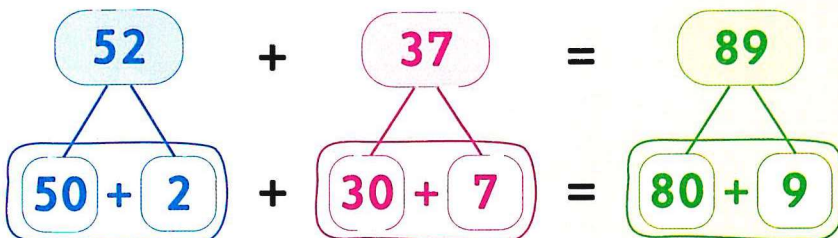
Notes for parents
• Make sure that your child added ones to ones and tens to tens.
• Ask your child to explain how to decompose an addend.

Draw sticks and small squares to add.

23 + **16** = _____

Tens	Ones	Tens	Ones	Tens	Ones

- Add the ones _____ + _____ = _____
- Add the tens _____ + _____ = _____
- How many in all ?

  _____ + _____ = _____

So, 23 + 16 = _____

Decompose each addend to add.

34 + **25** = [_____]

[⬜ + ⬜] + [⬜ + ⬜] = [⬜ + ⬜]

- Add the ones _____ + _____ = _____
- Add the tens _____ + _____ = _____
- How many in all ?

  _____ + _____ = _____

So, 34 + 25 = _____
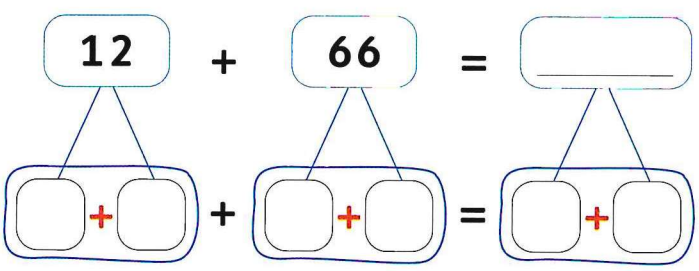
12 + **66** = [_____]

[⬜ + ⬜] + [⬜ + ⬜] = [⬜ + ⬜]

- Add the ones _____ + _____ = _____
- Add the tens _____ + _____ = _____
- How many in all ?

  _____ + _____ = _____

So, 12 + 66 = _____
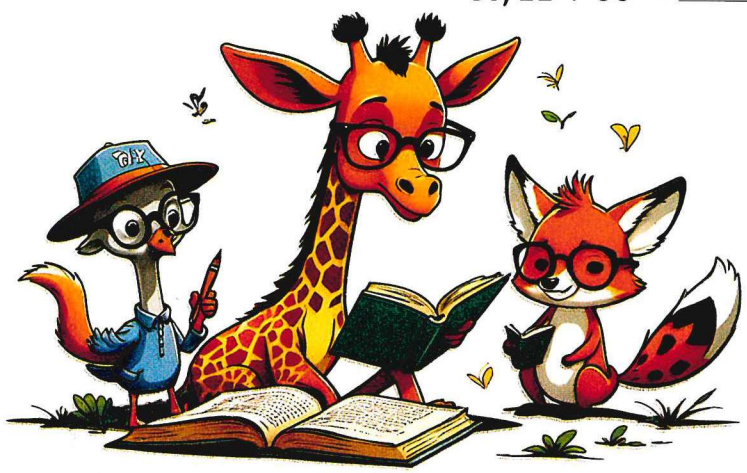
Adding without regrouping

📖 From the school book

1 **Draw sticks and small squares to add.**

a. **34** + **42** = _____

Tens	Ones

Tens	Ones

Tens	Ones

• Add the ones _____ + _____ = _____

• Add the tens _____ + _____ = _____

• How many in all ?

_____ + _____ = _____

So, 34 + 42 = _____

b. **15** + **51** = _____

Tens	Ones

Tens	Ones

Tens	Ones

• Add the ones _____ + _____ = _____

• Add the tens _____ + _____ = _____

• How many in all ?

_____ + _____ = _____

So, 15 + 51 = _____

c. **22** + **74** = _____

Tens	Ones

Tens	Ones

Tens	Ones

• Add the ones _____ + _____ = _____

• Add the tens _____ + _____ = _____

• How many in all ?

_____ + _____ = _____

So, 22 + 74 = _____

d. **67** + **20** = _____

Tens	Ones

Tens	Ones

Tens	Ones

• Add the ones _____ + _____ = _____

• Add the tens _____ + _____ = _____

• How many in all ?

_____ + _____ = _____

So, 67 + 20 = _____

2 **Decompose each addend to add.**

a.

$$\boxed{52} \; + \; \boxed{14} \; = \; \boxed{}$$

$\boxed{+} \; + \; \boxed{+} \; = \; \boxed{+}$
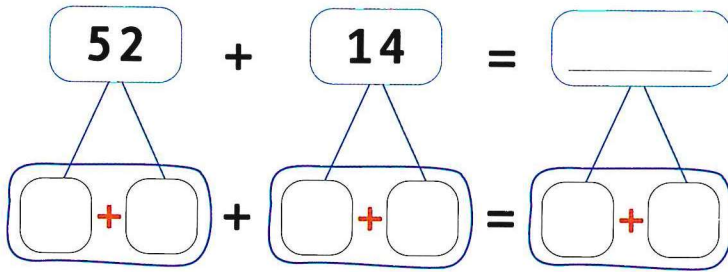
- Add the ones _____ + _____ = _____
- Add the tens _____ + _____ = _____
- How many in all ?

  _____ + _____ = _____

So, 52 + 14 = _____

b.

$$\boxed{31} \; + \; \boxed{43} \; = \; \boxed{}$$

$\boxed{+} \; + \; \boxed{+} \; = \; \boxed{+}$
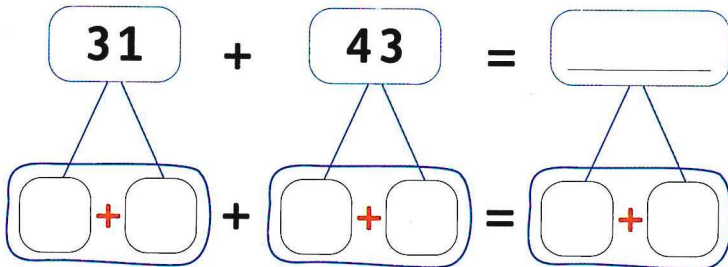
- Add the ones _____ + _____ = _____
- Add the tens _____ + _____ = _____
- How many in all ?

  _____ + _____ = _____

So, 31 + 43 = _____

c.

$$\boxed{36} \; + \; \boxed{63} \; = \; \boxed{}$$

$\boxed{+} \; + \; \boxed{+} \; = \; \boxed{+}$
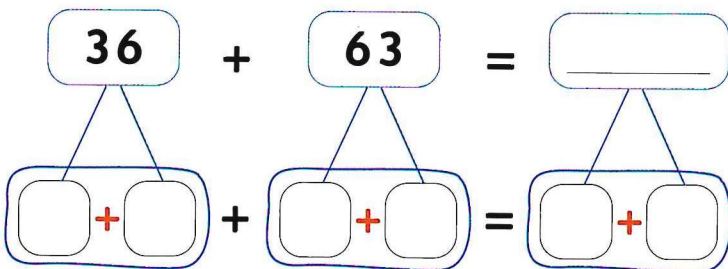
- Add the ones _____ + _____ = _____
- Add the tens _____ + _____ = _____
- How many in all ?

  _____ + _____ = _____

So, 36 + 63 = _____

d.

$$\boxed{24} \; + \; \boxed{11} \; = \; \boxed{}$$

$\boxed{+} \; + \; \boxed{+} \; = \; \boxed{+}$
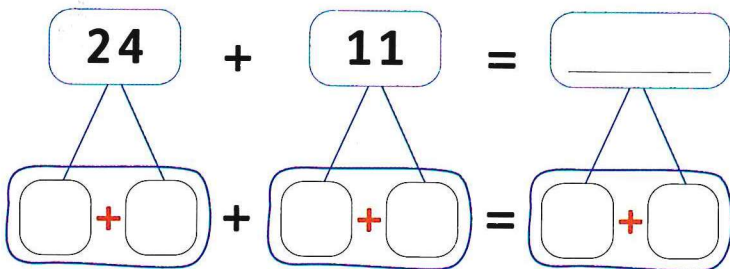
- Add the ones _____ + _____ = _____
- Add the tens _____ + _____ = _____
- How many in all ?

  _____ + _____ = _____

So, 24 + 11 = _____

3 **Find the answer.**

a. 📖 Miryam found 68 seashells on the beach.
Her sister found 21 seashells.

How many seashells did they find in all?

☐ + ☐ = ☐

Tens	Ones		Tens	Ones		Tens	Ones

b. A garden has 41 apple trees and 56 orange trees.

How many trees are there in the garden ?

☐ + ☐ = ☐

(☐ + ☐) + (☐ + ☐) = (☐ + ☐)
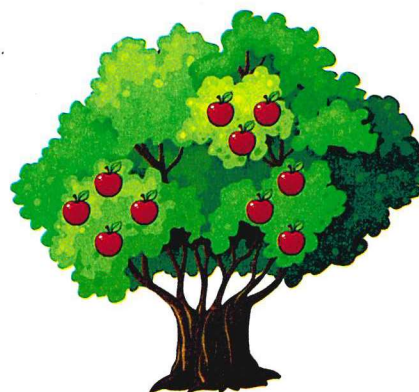
c. 📖 Aisha went on a bug hunt. She counted 62 ants and 26 crickets.

How many bugs did she find in all?

_____

_____

_____
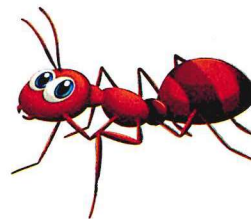
d. 📖 Layla has a collection of stickers. She has 54 car stickers
and 44 superhero stickers. **How many stickers does Layla
have all togetter?**

_____

_____

_____

4 Solve each of the following addition problems.

a.
```
    5 2
  + 3 4
  -----
```
Work area

b.
```
    2 1
  + 1 8
  -----
```
Work area

c.
```
    3 6
  + 1 1
  -----
```
Work area

d.
```
    6 2
  + 2 5
  -----
```
Work area

e.
```
    8 3
  +   4
  -----
```
Work area

Think:
4 is 4 ones and 0 tens.

f.
```
    7 3
  + 2 0
  -----
```
Work area

Think:
20 is 2 tens and 0 ones.

5 Find the result of each of the following.

a. 23 + 45 = ——
b. 14 + 15 = ——
c. 42 + 53 = ——
d. 63 + 26 = ——
e. 31 + 60 = ——
f. 33 + 25 = ——
g. 7 + 41 = ——
h. 19 + 10 = ——
i. 82 + 5 = ——
j. 56 + 22 = ——

Place a smiley face

Subtracting without regrouping

📝 **Learn**

- **How to subtract** $56 - 24$?

First way

Decompose by drawing sticks for tens and small squares for ones for the first number, then take away the second number to subtract.

$$56 \quad - \quad 24 \quad = \quad 32$$

Tens	Ones
⊟⊟⊟ ⊠⊠	⊠ ⊠ ⊠ ⊠ □ □

Tens	Ones
⊟⊟⊟	□ □
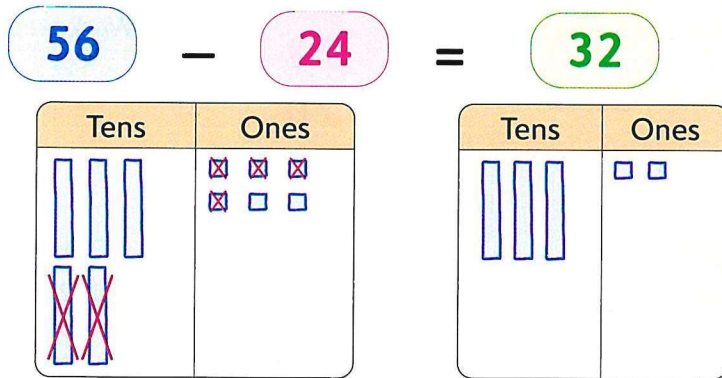
I subtracted the ones
$6 - 4 = 2$
I subtracted the tens
$50 - 20 = 30$

How many in all ?
$30 + 2 = 32$
So, $56 - 24 = 32$

Second way

Decompose each number into tens and ones to subtract.

$$56 \quad - \quad 24 \quad = \quad 32$$

$$\boxed{50} + \boxed{6} \quad - \quad \boxed{20} + \boxed{4} \quad = \quad \boxed{30} + \boxed{2}$$
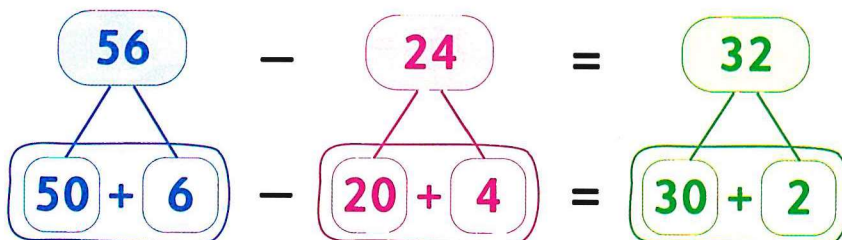
Notes for parents
- Make sure that your child subtracted the smaller number from the greater number and subtracted ones from ones and tens from tens.
- Ask your child to remember how to decompose the numbers.

Draw sticks and small squares. Take away to subtract.

64 — 13 = _____

Tens	Ones

Tens	Ones

• Subtract the ones _____ — _____ = _____

• Subtract the tens _____ — _____ = _____

• How many in all ?

_____ + _____ = _____

So, 64 — 13 = _____

Decompose each number to subtract.

39 — **26** = [ ]

([ ] + [ ]) — ([ ] + [ ]) = ([ ] + [ ])

• Subtract the ones _____ — _____ = _____

• Subtract the tens _____ — _____ = _____

• How many in all ?

_____ + _____ = _____

So, 39 — 26 = _____

75 — **41** = [ ]

([ ] + [ ]) — ([ ] + [ ]) = ([ ] + [ ])

• Subtract the ones _____ — _____ = _____

• Subtract the tens _____ — _____ = _____

• How many in all ?

_____ + _____ = _____

So, 75 — 41 = _____

1 Draw sticks and small squares to subtract.

a. **49 — 32 =** _____

Tens	Ones

Tens	Ones

- Subtract the ones _____ − _____ = _____
- Subtract the tens _____ − _____ = _____
- How many in all ?

  _____ + _____ = _____

So, 49 − 32 = _____

b. **87 — 55 =** _____

Tens	Ones

Tens	Ones

- Subtract the ones _____ − _____ = _____
- Subtract the tens _____ − _____ = _____
- How many in all ?

  _____ + _____ = _____

So, 87 − 55 = _____

c. **76 — 34 =** _____

Tens	Ones

Tens	Ones

- Subtract the ones _____ − _____ = _____
- Subtract the tens _____ − _____ = _____
- How many in all ?

  _____ + _____ = _____

So, 76 − 34 = _____

d. **35 — 20 =** _____

Tens	Ones

Tens	Ones

- Subtract the ones _____ − _____ = _____
- Subtract the tens _____ − _____ = _____
- How many in all ?

  _____ + _____ = _____

So, 35 − 20 = _____

2 **Decompose each number into tens and ones to subtract.**

a.

$$94 - 52 = \boxed{}$$

$$\boxed{} + \boxed{} - \boxed{} + \boxed{} = \boxed{} + \boxed{}$$
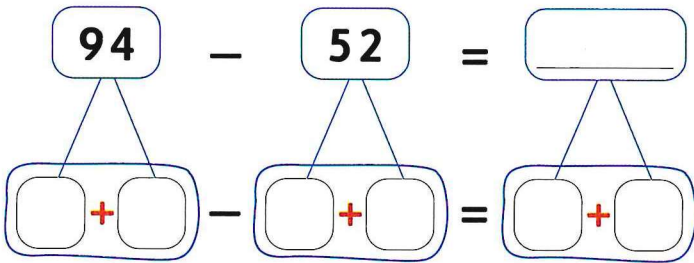
- Subtract the ones _____ – _____ = _____
- Subtract the tens _____ – _____ = _____
- How many in all ?

_____ + _____ = _____

So, 94 – 52 = _____

b.

$$86 - 33 = \boxed{}$$

$$\boxed{} + \boxed{} - \boxed{} + \boxed{} = \boxed{} + \boxed{}$$

- Subtract the ones _____ – _____ = _____
- Subtract the tens _____ – _____ = _____
- How many in all ?

_____ + _____ = _____

So, 86 – 33 = _____

c.

$$77 - 16 = \boxed{}$$

$$\boxed{} + \boxed{} - \boxed{} + \boxed{} = \boxed{} + \boxed{}$$

- Subtract the ones _____ – _____ = _____
- Subtract the tens _____ – _____ = _____
- How many in all ?

_____ + _____ = _____

So, 77 – 16 = _____

d.

$$42 - 20 = \boxed{}$$

$$\boxed{} + \boxed{} - \boxed{} + \boxed{} = \boxed{} + \boxed{}$$
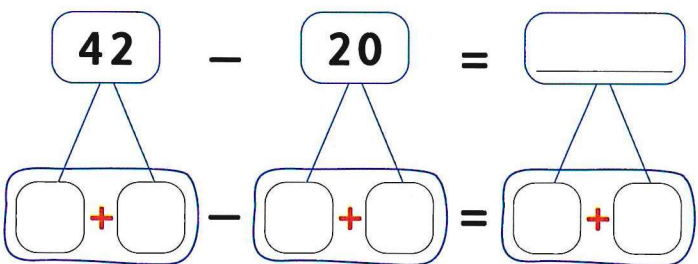
- Subtract the ones _____ – _____ = _____
- Subtract the tens _____ – _____ = _____
- How many in all ?

_____ + _____ = _____

So, 42 – 20 = _____

3 **Find the answer.**

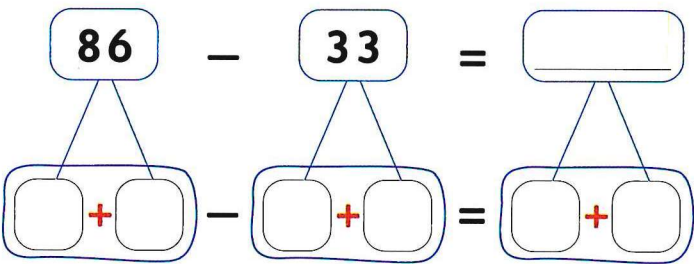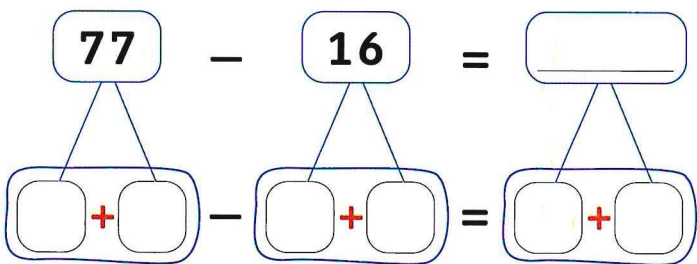a. 📖 Kamilah sewed 59 beads on her dress.
Unfortunately, 16 of them fell off.
How many beads were left on her dress ?

| ⬚ | − | ⬚ | = | ⬚ |

Tens	Ones		Tens	Ones

b. 📖 Rashida had 26 deates. She gave 13 to her sister.
How many dates does Rashida have left ?

⬚ − ⬚ = ⬚

⬚ + ⬚ − ⬚ + ⬚ = ⬚ + ⬚

c. 📖 Samir had 65 coins in his collection but then he lost 24 of them.
How many coins did he have left ?

_____

_____

_____

d. Karim has 38 marbles. His sister Karma has 23 marbles.
How many more marbles does Karim have than Karma ?

_____

_____

_____

4 Find the difference in each of the following problems.

a.
```
    7 9
  - 1 4
  _____
```
Work area

b.
```
    1 7
  - 1 3
  _____
```
Work area

c.
```
    2 6
  - 1 6
  _____
```
Work area

d.
```
    8 2
  - 7 1
  _____
```
Work area

e.
```
    3 8
  -   6
  _____
```
Work area

Think:
6 is 6 ones and 0 tens.

f.
```
    9 5
  - 4 0
  _____
```
Work area

Think:
40 is 4 tens and 0 ones.

5 Find the result of each of the following.

a. 53 – 12 = _____

c. 78 – 68 = _____

e. 49 – 25 = _____

g. 58 – 34 = _____

i. 68 – 40 = _____

b. 95 – 4 = _____

d. 86 – 32 = _____

f. 77 – 46 = _____

h. 89 – 82 = _____

j. 39 – 19 = _____

Place a smiley face

127
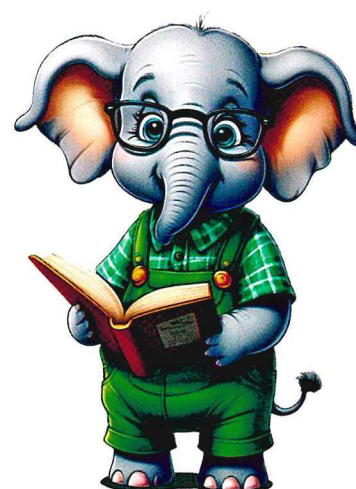
Estimating the sum and the difference

Learn 1 Using numbers chart to estimate

Estimation is finding a number that is close to another number.
Estimation makes the numbers easier to add and subtract.

You can use the 120 chart to estimate a 2-digit number.

111	112	113	114	115	116	117	118	119	120
101	102	103	104	105	106	107	108	109	110
91	92	93	94	95	96	97	98	99	100
81	82	83	84	85	86	87	88	89	90
71	72	73	74	75	76	77	78	79	80
61	62	63	64	65	66	67	68	69	70
51	52	53	54	55	56	57	58	59	60
41	42	43	44	45	46	47	48	49	50
31	32	33	34	35	36	37	38	39	40
21	22	23	24	25	26	27	28	29	30
11	12	13	14	15	16	17	18	19	20
1	2	3	4	5	6	7	8	9	10

I can use the nearest ten to estimate.

- **12** is **closer** to *10*
- **58** is **closer** to *60*

Check

Use the 120 chart to estimate the following numbers.

a. 41 is closer to _____

b. 26 is closer to _____

c. 14 is closer to _____

d. 8 is closer to _____

e. 89 is closer to _____

f. 73 is closer to _____

g. 57 is closer to _____

h. 18 is closer to _____

i. 32 is closer to _____

Notes for parents
- Make sure that your child understood the estimation.
- Find more numbers and ask your child to find the closer number.

You can use the 120 chart to estimate in addition and subtraction.

• **48** is **closer** to **50**

• **21** is **closer** to **20**

111	112	113	114	115	116	117	118	119	120
101	102	103	104	105	106	107	108	109	110
91	92	93	94	95	96	97	98	99	100
81	82	83	84	85	86	87	88	89	90
71	72	73	74	75	76	77	78	79	80
61	62	63	64	65	66	67	68	69	70
51	52	53	54	55	56	57	58	59	60
41	42	43	44	45	46	47	48	49	50
31	32	33	34	35	36	37	38	39	40
21	22	23	24	25	26	27	28	29	30
11	12	13	14	15	16	17	18	19	20
1	2	3	4	5	6	7	8	9	10

In addition

Think:

```
   48
 +  21
 _____
```

```
+  50
   20
 _____
   70
```

So, 48 + 21 is about **70**

In subtraction

Think:

```
   48
 −  21
 _____
```

```
−  50
   20
 _____
   30
```

So, 48 − 21 is about **30**

Check 🔍

Use the 120 chart to estimate.

a.
```
   27
 +  11
 _____
```
Think:
```
+  [  ]
   [  ]
```
27 + 11 is about _____

b.
```
   62
 −  21
 _____
```
Think:
```
−  [  ]
   [  ]
```
62 − 21 is about _____

c.
```
   16
 +  40
 _____
```
Think:
```
+  [  ]
   [  ]
```
16 + 40 is about _____

d.
```
   59
 −  37
 _____
```
Think:
```
−  [  ]
   [  ]
```
59 − 37 is about _____

• Tell your child that estimation does not give you the exact answer but gives you a closer answer.

Learn **3** Estimation to add and subtract using place value

You can use place value to estimate in addition and subtraction.
Circle the highest place value in the first number and the second number.

Using tens can help you estimate.

In addition

Think:

③1   30
+ ④2   + 40
          70

So, 31 + 42 is about **70**

In subtraction

Think:

⑤4   50
− ②3   − 20
          30

So, 54 − 23 is about **30**

Check

Use place value strategy to estimate.

a.
```
   5 2        Think:
+  3 2      +  [   ]
              [   ]
```
52 + 32 is about _____

b.
```
   9 3        Think:
−  5 2      −  [   ]
              [   ]
```
93 − 52 is about _____

c.
```
   1 1        Think:
+  6 3      +  [   ]
              [   ]
```
11 + 63 is about _____

d.
```
   3 6        Think:
−  1 4      −  [   ]
              [   ]
```
36 − 14 is about _____

Notes for parents
• Let your child use the place value strategy to estimate the sum or the difference.

Estimating the sum and the difference

From the school book

1 Use the 120 chart to estimate the following numbers.

a. 27 is closer to _____

b. 71 is closer to _____

c. 82 is closer to _____

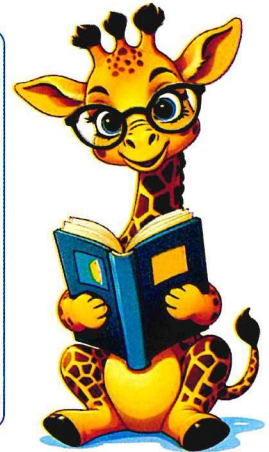d. 87 is closer to _____

e. 9 is closer to _____

f. 57 is closer to _____

g. 38 is closer to _____

h. 41 is closer to _____

i. 64 is closer to _____

j. 12 is closer to _____

2 Use the 120 chart to estimate.

a.

   3 7
+ 2 2

Think:
+

37 + 22 is about _____

b.

   7 3
− 2 1

Think:
−

73 − 21 is about _____

c.

   5 8
+ 2 7

Think:
+

58 + 27 is about _____

d.

   6 8
− 2 1

Think:
−

68 − 21 is about _____

e.

   1 8
+ 4 2

Think:
+

18 + 42 is about _____

f.

   4 9
− 2 8

Think:
−

49 − 28 is about _____

3 Use place value strategy to estimate.

a. 📖

$$
\begin{array}{r}
4\,3 \\
+\ 4\,2 \\
\hline
\end{array}
$$

Think:

+ ☐
☐

43 + 42 is about _____

b.

$$
\begin{array}{r}
4\,9 \\
-\ 2\,7 \\
\hline
\end{array}
$$

Think:

− ☐
☐

49 − 27 is about _____

c. 📖

$$
\begin{array}{r}
2\,3 \\
+\ 5\,8 \\
\hline
\end{array}
$$

Think:

+ ☐
☐

23 + 58 is about _____

d. 📖

$$
\begin{array}{r}
5\,1 \\
-\ 2\,4 \\
\hline
\end{array}
$$

Think:

− ☐
☐

51 − 24 is about _____

e.

$$
\begin{array}{r}
5\,3 \\
-\ 2\,1 \\
\hline
\end{array}
$$

Think:

− ☐
☐

53 − 21 is about _____

f. 📖

$$
\begin{array}{r}
6\,7 \\
+\ 2\,5 \\
\hline
\end{array}
$$

Think:

+ ☐
☐

67 + 25 is about _____

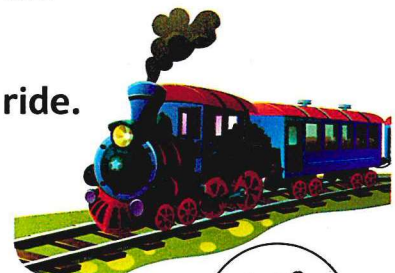**4** Find the answer.

a. A bookstore sold 34 books on Wednesday and 23 books on Thursday.

Estimate how many books sold on the two days.

_____

_____

_____

b. 📖 Raj has a 64-minute train ride. He has been on the train for 32 minutes.

Estimate how many minutes are left on his train ride.

_____

_____

_____

Place a smiley face

Comparing the sum and the estimation

📝 Learn

- **Estimate the sum of** $23 + 31$
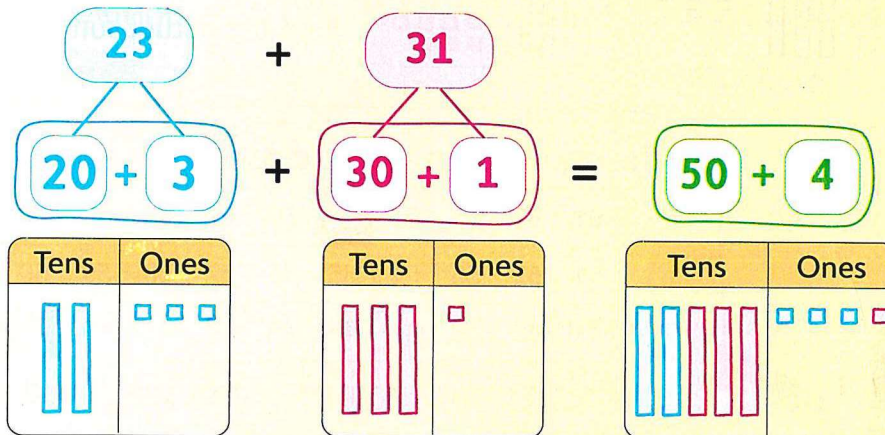
My estimation is 50.

By using the place value strategy.

Think
$20 + 30 = 50$

So, the estimation is 50.

- Finding the actual sum to check if the estimation is accepted or is not accepted.

23 + 31

$20 + 3$ + $30 + 1$ = $50 + 4$

Tens	Ones
‖	□ □ □

Tens	Ones
‖‖	□

Tens	Ones
‖‖‖	□ □ □ □

Add the ones : $3 + 1 = 4$

Add the tens : $20 + 30 = 50$

Find the actual sum : $50 + 4 = 54$

The actual sum is **close** to my estimation :

61	62	63	64	65	66	67	68	69	70
51	52	53	**54**	55	56	57	58	59	60
41	42	43	44	45	46	47	48	49	**50**

Then my estimation is **accepted**.

Notes for parents
- Tell your child that estimation does not give you the actual sum.
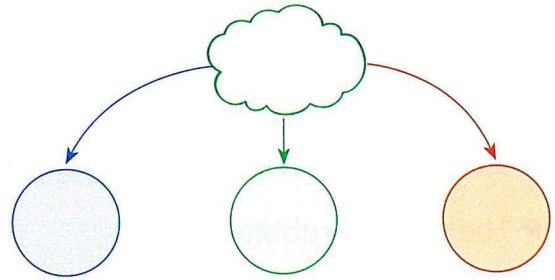- Use the 120 chart to compare his/her estimation and the actual sum.

1 Draw to show equal groups. Fill in the part – part – whole model. Complete.
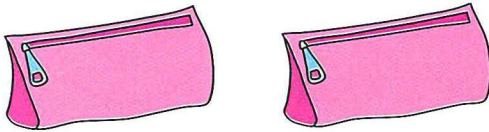
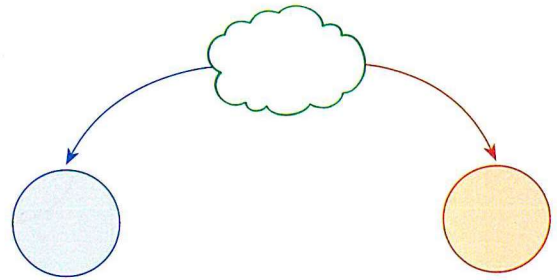**a.** **9** coins divided among **3** money boxes.

Each money box has _____ coins.

b. **6** pencils divided among **2** pencil cases.

Each pencil case has _____ pencils.

c. **12** oranges divided among **3** plates.
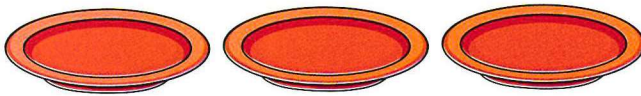
Each plate has _____ oranges.
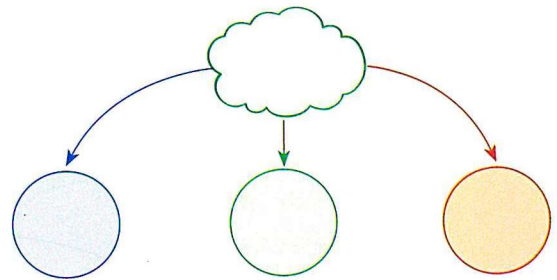
d. 📖 There are **16** fish that need to be placed in **4** bowls.
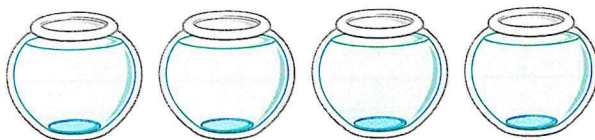
Each bowl has _____ fish.
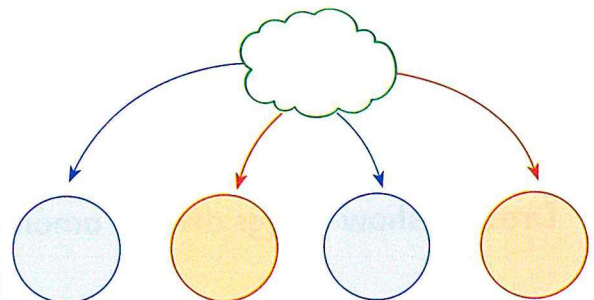
e. **8** marbles divided among **4** bags.

Each bag has _____ marbles.

---
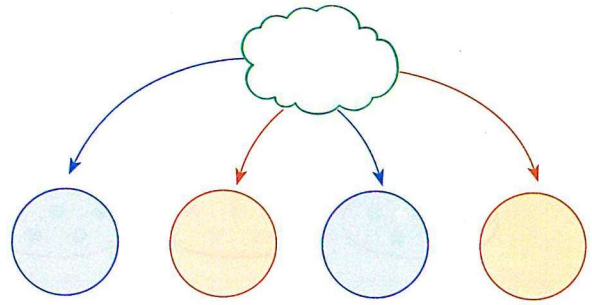
f. 📖 Sameh is preparing gift baskets. He has **20** oranges that need to be divided equally between **5** baskets.

Each basket has _____ oranges.

---

g. **15** toys divided among **5** boxes.

Each box has _____ toys.

---

h. 📖 The teacher has **36** crayons to share equally between **6** students.
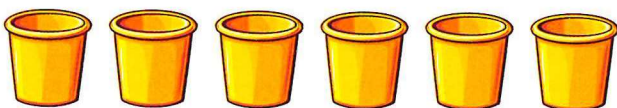
Each cup has _____ crayons.

135
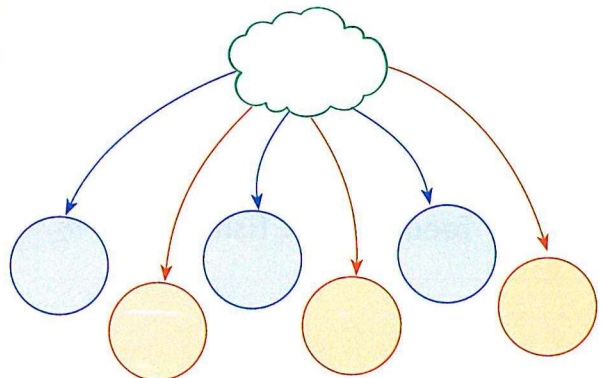
g. [51] + [42] (My estimation is _____)

□ + □   □ + □

• Add the ones ____ + ____ = ____

• Add the tens ____ + ____ = ____

• Find the actual sum ____ + ____ = ____

[Choose] My estimation is

Accepted   Not accepted

h. [39] + [21] (My estimation is _____)

□ + □   □ + □

• Add the ones ____ + ____ = ____

• Add the tens ____ + ____ = ____

• Find the actual sum ____ + ____ = ____

[Choose] My estimation is :

Accepted   Not accepted

i. [17] + [22] (My estimation is _____)

□ + □   □ + □

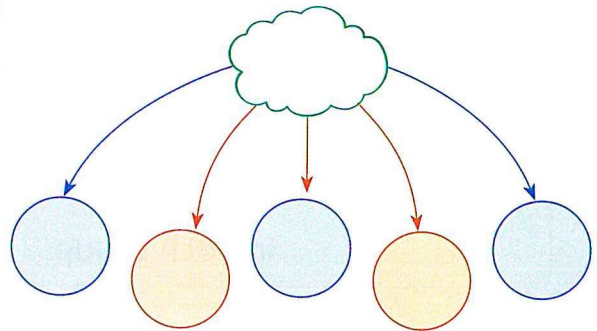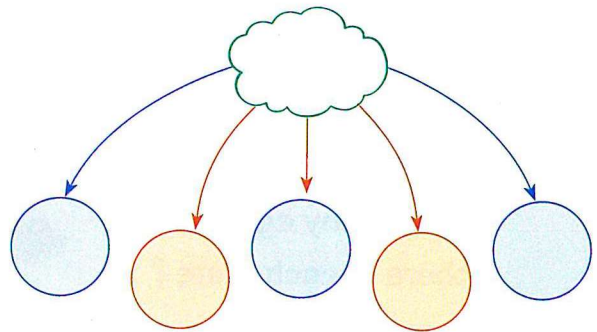• Add the ones ____ + ____ = ____

• Add the tens ____ + ____ = ____

• Find the actual sum ____ + ____ = ____

[Choose] My estimation is :

Accepted   Not accepted

j. [11] + [31] (My estimation is _____)

□ + □   □ + □

• Add the ones ____ + ____ = ____

• Add the tens ____ + ____ = ____

• Find the actual sum ____ + ____ = ____

[Choose] My estimation is :

Accepted   Not accepted

2 **Estimate the sum. Find the actual sum. Choose if your estimation is accepted or not accepted.**

a. [31 + 22]

Estimation = ____

Actual sum = ____

Accepted   Not accepted

b. [48 + 37]

Estimation = ____

Actual sum = ____

Accepted   Not accepted

c. [57 + 19]

Estimation = ____

Actual sum = ____

Accepted   Not accepted

d. [19 + 71]

Estimation = ____

Actual sum = ____

Accepted   Not accepted

Place a smiley face

- **Adding by regrouping ones**
- **More of adding by regrouping ones**

Learn

Regrouping means changing the way you group your tens and ones.

Add **7** to **16** How many in all ?

Tens	Ones

Start with *16*

Tens	Ones

Add **7**

Tens	Ones
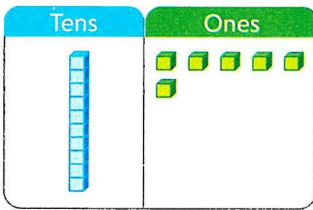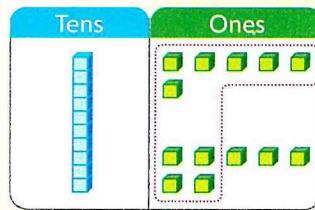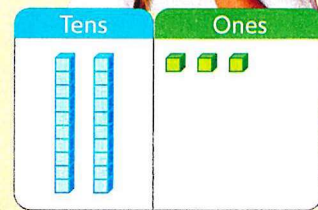
Regroup 10 ones as 1 ten.
2 tens and **3** ones
23 in all.

Model 2-digit addition

Add **37** and **26**

Step **1**	Step **2**	Step **3**
Show 37 and 26. Count the ones. Think can you make a ten ?	If you can make a ten, regroup.	Write how many tens and ones. Write the sum.
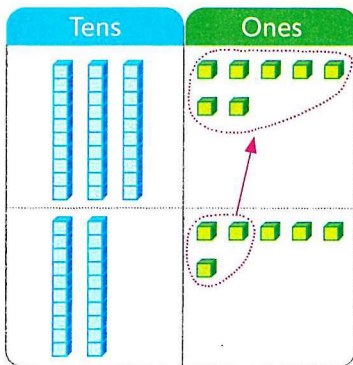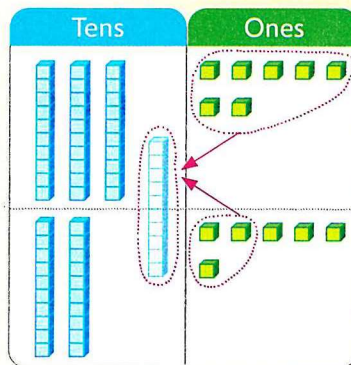
Step 1

Tens	Ones

Yes   No

Step 2

Tens	Ones

Step 3

Tens	Ones
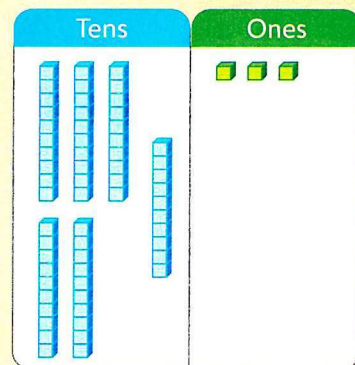
6 tens   3 ones
60 + 3
63

Notes for parents
• Ask your child how to group 5 ones and 8 ones as tens and ones (1 ten and 3 ones).

137

• **Do you need to regroup to add ?**

25 + 9 = 34

Tens	Ones

Tens	Ones
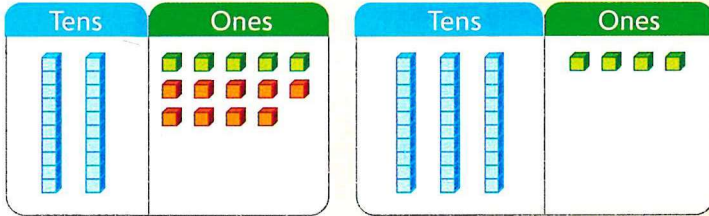
Start with 25. Add 9.
You have **more than** 9 ones.

You need to regroup.

$$\begin{array}{r} 25 \\ + \ 37 \\ \hline 62 \end{array}$$

Tens	Ones
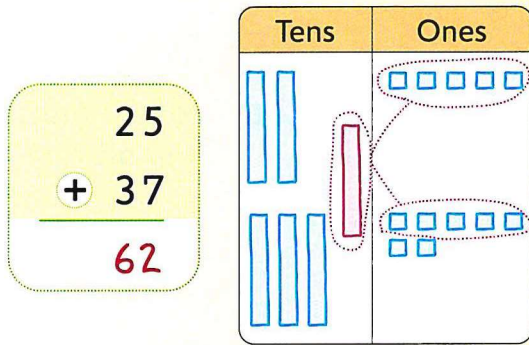
The total ones is **more than** 9.
You need to regroup, then regroup 12 ones as 1 ten 2 ones.

$24 + 3 = 27$

Tens	Ones
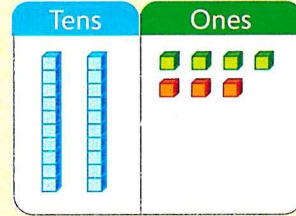
You have **less than** 10 ones.
You do not need to regroup.

$$\begin{array}{r} 12 \\ + \ 45 \\ \hline 57 \end{array}$$

Tens	Ones
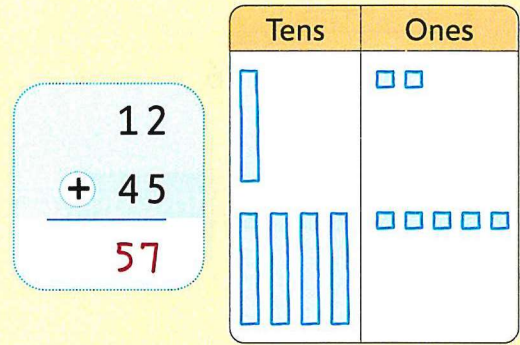
The total ones is **less than** 10.
You do not need to regroup.

Check 🔍

Find the sum. Choose if you add with or without regrouping.

43 + 18 = _____
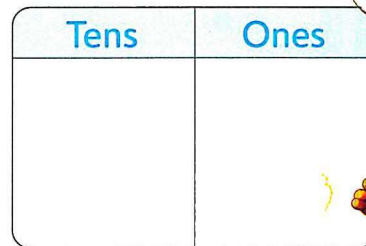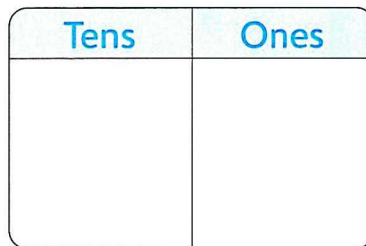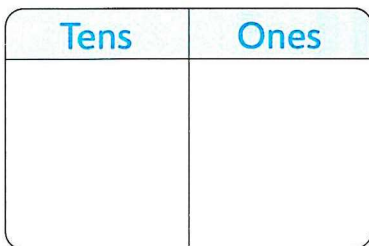
Tens	Ones

Tens	Ones

Tens	Ones

Choose : (With regrouping) (Without regrouping)

Notes for parents
• Ask your child why regrouping is needed to find sum 67+5.

- **Adding by regrouping ones**
- **More of adding by regrouping ones**

1 **Find the sum.**

Draw | for ten
□ for one
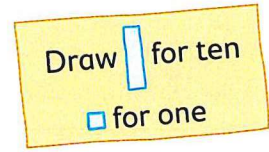
a. Add 34 + 8

Tens	Ones

Show *34*

Tens	Ones

Add *8*

Tens	Ones

_____ tens, _____ ones,

_____ in all.

b. Add 52 + 9

Tens	Ones

Show *52*

Tens	Ones

Add *9*

Tens	Ones

_____ tens, _____ ones,

_____ in all.

c. Add 27 + 6

Tens	Ones

Show *27*

Tens	Ones

Add *6*

Tens	Ones

_____ tens, _____ ones,

_____ in all.

d. Add 45 + 7

Tens	Ones

Show *45*

Tens	Ones

Add *7*

Tens	Ones

_____ tens, _____ ones,

_____ in all.

2 Draw sticks for tens and small squares for ones to represent each addend. Regroup the ones. Find the sum.

a.   23   +   39   = _____

Tens	Ones

Tens	Ones

Tens	Ones

b. 📖   56   +   35   = _____

Tens	Ones

Tens	Ones

Tens	Ones

c. 📖   28   +   54   = _____

Tens	Ones

Tens	Ones

Tens	Ones

d. 📖   29   +   43   = _____

Tens	Ones

Tens	Ones

Tens	Ones

3 Use [Tens | Ones], draw | and ◻.

The first one is done for you.

Show this many.	Add this many.	Do you need to regroup ?	Add.
a. 36	8	Yes	36 + 8 = 44
b. 23	4	———	23 + 4 = _____
c. 19	5	———	19 + 5 = _____
d. 75	3	———	75 + 3 = _____
e. 34	37	———	34 + 37 = _____
f. 58	24	———	58 + 24 = _____
g. 72	15	———	72 + 15 = _____

4 Find the sum. Choose if you add with or without regrouping.

a.   **26**   +   **53**   =   _____

Tens	Ones

Tens	Ones

Tens	Ones

Choose :   With regrouping   Without regrouping

b.   **49**   +   **12**   =   _____

Tens	Ones

Tens	Ones

Tens	Ones

Choose :   With regrouping   Without regrouping

c.   **37**   +   **23**   =   _____

Tens	Ones

Tens	Ones

Tens	Ones

Choose :   With regrouping   Without regrouping

5 Find the sum of each of the following.

a.
```
   34
+   7
_____

_____
```

b.
```
   19
+   8
_____

_____
```

c.
```
    7
+  45
_____

_____
```

d.
```
   28
+   5
_____

_____
```

e.
```
   17
+  29
_____

_____
```

f.
```
   23
+  35
_____

_____
```

g.
```
   41
+  14
_____

_____
```

h.
```
   74
+  16
_____

_____
```

i.
```
   46
+  38
_____

_____
```

j.
```
   28
+  14
_____

_____
```

k.
```
   76
+  17
_____

_____
```

l.
```
   69
+  25
_____

_____
```

m.
```
   53
+  18
_____

_____
```

n.
```
   35
+  35
_____

_____
```

o.
```
   39
+  19
_____

_____
```

p.
```
   48
+  27
_____

_____
```

q.
```
   26
+  37
_____

_____
```

r.
```
   78
+  12
_____

_____
```

s.
```
   33
+  49
_____

_____
```

t.
```
   47
+  18
_____

_____
```

u.
```
   54
+  39
_____

_____
```

v.
```
   19
+  18
_____

_____
```

w.
```
   38
+  55
_____

_____
```

x.
```
   62
+  18
_____

_____
```

y.
```
   77
+  14
_____

_____
```

6 Find the sum of each of the following.

a. 34 + 12 = _____

b. 22 + 14 = _____

c. 15 + 17 = _____

d. 29 + 8 = _____

e. 61 + 19 = _____

f. 39 + 28 = _____

g. 27 + 27 = _____

h. 49 + 14 = _____

i. 28 + 43 = _____

j. 29 + 49 = _____

k. 73 + 7 = _____

l. 30 + 17 = _____

m. 43 + 8 = _____

n. 24 + 60 = _____

o. 41 + 39 = _____

p. 77 + 5 = _____

q. 34 + 43 = _____

r. 55 + 6 = _____

s. 24 + 59 = _____

t. 71 + 27 = _____

u. 27 + 44 = _____

v. 48 + 41 = _____

w. 63 + 18 = _____

x. 56 + 17 = _____

7 Put (✓) to the correct statement or (✗) to the incorrect statement.

a. 37 + 24 = 51 ( )

b. 45 + 38 = 83 ( )

c. 19 + 19 = 29 ( )

d. 26 + 24 = fifty ( )

e. 78 + 5 = 80 + 3 ( )

f. 67 + 18 = fifty-eight ( )

g. 14 + 37 = 51 ( )

h. 59 + 21 = 34 + 46 ( )

Place a smiley face

Adding more than two numbers by regrouping ones

📝 **Learn**

Add **34** + **19** + **13** + **25**

To add four 2-digit numbers, follow these steps.

Step 1 Add the first two numbers.

34 + **19** = **53**

Tens	Ones
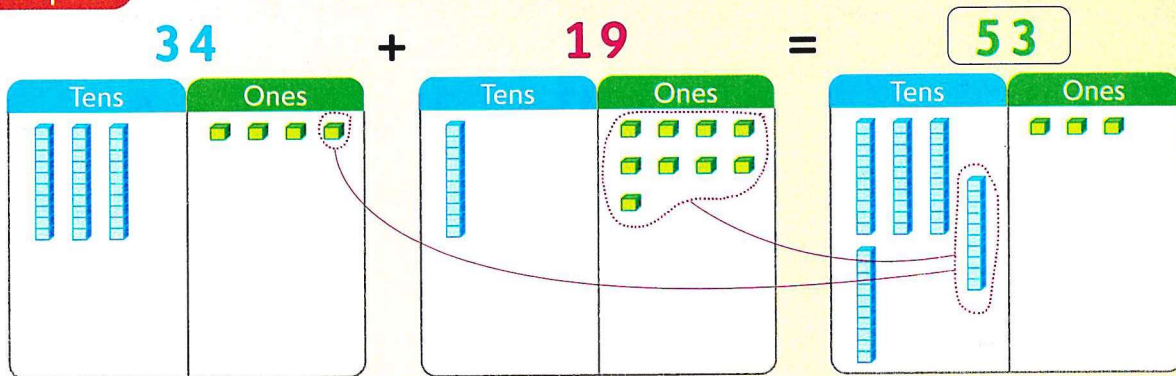
Tens	Ones

Tens	Ones

Step 2 Add the last two numbers.

13 + **25** = **38**

Tens	Ones
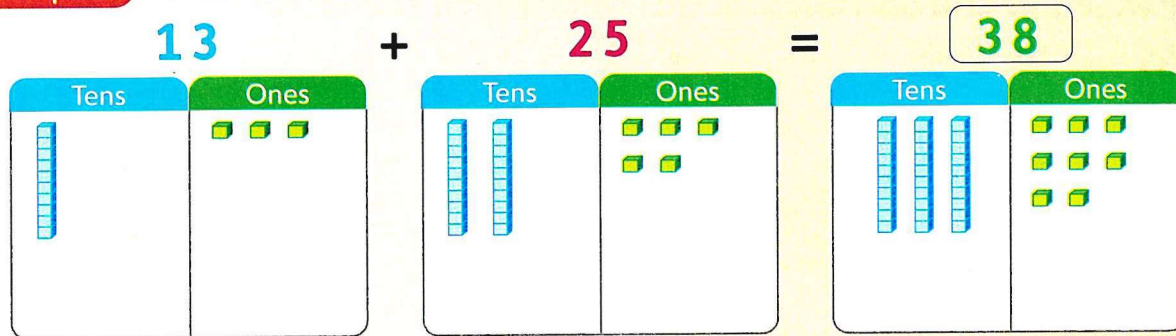
Tens	Ones

Tens	Ones

Step 3 Add the two sums to find the total sum.

53 + **38** = **91**

Tens	Ones

Tens	Ones

Tens	Ones

Notes for parents
• Your child can choose any two numbers to add first because he/she can add in any order.
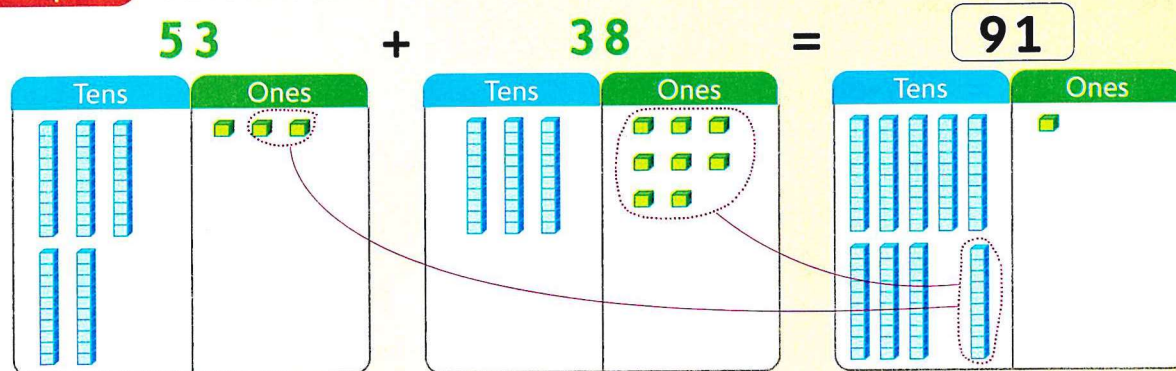
Add to find the total.

14 + 22 + 36 + 17

_____ + _____ = _____

Tens	Ones	Tens	Ones	Tens	Ones

_____ + _____ = _____

Tens	Ones	Tens	Ones	Tens	Ones

_____ + _____ = _____

Tens	Ones	Tens	Ones	Tens	Ones
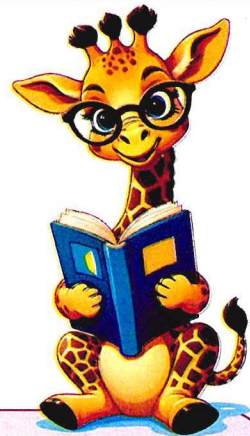
27 + 19 + 21 + 13

_____ + _____ = _____

Tens	Ones	Tens	Ones	Tens	Ones

_____ + _____ = _____

Tens	Ones	Tens	Ones	Tens	Ones

_____ + _____ = _____

Tens	Ones	Tens	Ones	Tens	Ones

Notes for parents
• Your child can look for numbers that make a ten such as 19 + 21.

Adding more than two numbers by regrouping ones

📖 From the school book

1 Add to find the total.

a.   13 + 31 + 19 + 25

_____ + _____ = _____

Tens	Ones	Tens	Ones	Tens	Ones

_____ + _____ = _____

Tens	Ones	Tens	Ones	Tens	Ones

_____ + _____ = _____

Tens	Ones	Tens	Ones	Tens	Ones

b.   38 + 9 + 15 + 36

_____ + _____ = _____

Tens	Ones	Tens	Ones	Tens	Ones

_____ + _____ = _____

Tens	Ones	Tens	Ones	Tens	Ones

_____ + _____ = _____

Tens	Ones	Tens	Ones	Tens	Ones

2 **Add each of the following.**

a 📖 13 + 17 + 22 + 29

b 9 + 27 + 15 + 36

c 48 + 7 + 12 + 15

d 57 + 5 + 19 + 17

e 📖 23 + 17 + 12 + 36

f 23 + 18 + 31 + 9

g 17 + 18 + 19 + 16

h 📖 22 + 19 + 18 + 14

Place a smiley face