Grade 4 – Lesson 3

Math Practice Sheets

Addition and Subtraction Part II

Examples

Practice Questions

Extra Challenge Unit

Student Name

_____

Unit 3.1

Finding the Missing Digits

Example

Find the missing digits.

$$\begin{array}{r} 2\,\square\,5 \\ +\,1\;3\;6 \\ \hline \square\;8\;\square \end{array} \quad \Rightarrow \quad \begin{array}{r} 2\,\boxed{4}\,5 \\ +\,1\;3\;6 \\ \hline \boxed{3}\;8\;\boxed{1} \end{array}$$

You know
5 + 6 = 11
1 + 3 + 4 = 8
2 + 1 = 3

$$\begin{array}{r} \square\;7\;4 \\ -\;2\;5\;\square \\ \hline 6\;\square\;3 \end{array} \quad \Rightarrow \quad \begin{array}{r} \boxed{8}\;7\;4 \\ -\;2\;5\;\boxed{1} \\ \hline 6\;\boxed{2}\;3 \end{array}$$

You know
4 - 1 = 3
7 - 5 = 2
8 - 2 = 6

To find missing digits you have to add or subtract as usual.
i.e. add or subtract ones, tens, and hundreds respectively from right to left and regroup if necessary.

Exercise

1. Find the missing digits.

a)

$$\begin{array}{r} 5\;6 \\ +\;2\;\square \\ \hline \square\;0 \end{array}$$

b)

$$\begin{array}{r} \square\;8 \\ -\;3\;4 \\ \hline 6\;\square \end{array}$$

c)

$$\begin{array}{r} 2\;\square\;4 \\ +\;\square\;3\;8 \\ \hline 4\;9\;\square \end{array}$$

d)

$$\begin{array}{r} \square\;7\;9 \\ -\;5\;2\;\square \\ \hline 3\;\square\;3 \end{array}$$

Unit 3.1

Finding the Missing Digits

Exercise

e)

$$\begin{array}{r} 6\ 8 \\ +\ \square\ 5 \\ \hline 9\ \square \end{array}$$

f)

$$\begin{array}{r} 7\ \square \\ -\ \square\ 0 \\ \hline 3\ 5 \end{array}$$

g)

$$\begin{array}{r} 3\ 5\ \square \\ +\ \square\ 3\ 3 \\ \hline 5\ \square\ 1 \end{array}$$

h)

$$\begin{array}{r} 3\ \square\ 7 \\ -\ \square\ 8\ \square \\ \hline 2\ 1\ 5 \end{array}$$

i)

$$\begin{array}{r} 7\ \square \\ +\ \square\ 7 \\ \hline 9\ 1 \end{array}$$

j)

$$\begin{array}{r} 4\ 6 \\ -\ 1\ \square \\ \hline \square\ 1 \end{array}$$

k)

$$\begin{array}{r} \square\ 4\ \square \\ -\ 2\ \square\ 1 \\ \hline 4\ 0\ 2 \end{array}$$

l)

$$\begin{array}{r} \square\ 1\ 9 \\ +\ 3\ \square\ 1 \\ \hline 8\ 9\ \square \end{array}$$

Unit 3.1

Finding the Missing Digits

Exercise

Solve the problems below.

2. Find the missing number.

$$80{,}000 - 28{,}000 = 50{,}000 + \_\_\_\_\_$$

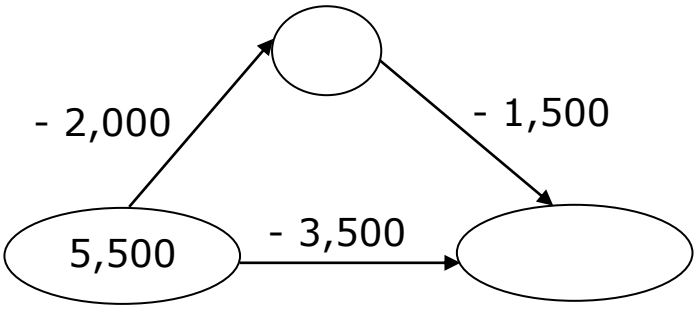
50,000 30,000

3. A dairy collected 30,000 liters of milk on Monday and 40,000 liters on Tuesday. How much milk did the company collect in the two days?

a) 7,000 b) 700

c) 70,000 d) 700,000

4. Fill in the missing numbers.



5. Find the missing digits. Explain how you found them.

$$\begin{array}{r} 2\ 6 \\ 4\ \square \\ +\ \square\ 7 \\ \hline \square\ 0\ 8 \end{array}$$

_____

_____

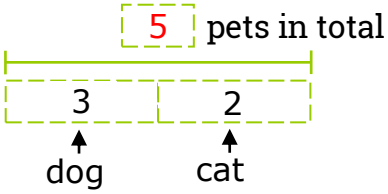
_____

Unit 3.2

Problem Solving with Missing or Extra Information

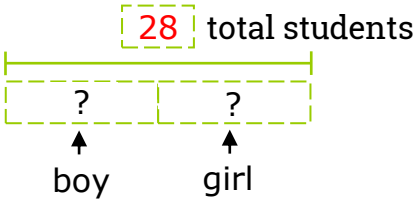
Example

Sawyer is 9 years old.
He has 3 dogs and 2 cats.
How many pets does Sawyer have in total?



Sawyer has 5 pets in total.
In this problem, the age of Sawyer is extra information. (The age of Sawyer was not needed to find the total
number of pets).

There are 28 students in grade four. How many students are boys?



In this problem, you do not have enough information to find the number of boys.
You need to be given the number of girls in order to find the number of boys.

Exercise

1. Check if the following problems have extra information or not enough information. Identify any information that is missing or that is not needed. Then solve the problems that have enough information.

   a) A bag contains 10 apples, bananas, and mangoes. If there are 5 apples, find the number of bananas and mangoes.

   b) Nicole buys 7 roses and 2 sunflowers. How many flowers does Nicole buy in total?

Problem Solving with Missing or Extra Information

Exercise

c) Melanie had $10. She bought a pen, a pencil, and a marker. She spent a total of $4 on the pen and the marker. How much money does she have left?

d) Kristin is reading a storybook. The book has 85 pages. So far, she has read 58 pages. How many more pages does Kristin need to read to finish the book?

e) A school lunch costs $1.55. Does Lynette have enough money to buy the lunch?

f) Mr. Wood is a young man. He wants to play golf. The golf center charges $13 on Saturday and $7 on Sunday. How much will Mr. Wood pays in total to play on both days?

g)

Unit 3.2

Problem Solving with Missing or Extra Information

Exercise

Solve the problems below.

2. The father is 30 years old, the mother is 25 years old, and their son is 5 years old. Find the total age of mother and son. Explain about missing or extra information.

3. There are 50 employees in an office. How many employees are female? Circle.

   a) Do not have enough information to solve

   b) Extra information is given

4. Riley spent 25 minutes playing basketball. Then she completes her homework. What information do we need to find how many minutes Riley spent in playing basketball and in completing her homework?

5. There are 500 flowers in Karina's garden. She planted 250 tulip bulbs in her garden. So far, only 178 bulbs have sprouted. How many tulips have not sprouted yet? Describe missing or extra information.

Unit 3.3

Mixed Problem Solving

Example

Alex and his family love to travel. This summer; they traveled 2,546 miles on vacation. If Alex's family traveled 1,250 miles last year, how many miles have they traveled in the past two years?

To find the total miles travelled, we have to add 2,546 and 1,250.

$$\begin{array}{r} 2{,}546 \\ +\ 1{,}250 \\ \hline 3{,}796 \end{array}$$

Vertical addition

or, $2{,}546 + 1{,}250 = 3{,}796$

Horizontal addition

You can use an addition pattern with place values too.

i.e.

$$\begin{array}{r} 2{,}546 = 2{,}000 + 500 + 40 + 6 \\ +\ 1{,}250 = +\ 1{,}000 + 200 + 50 + 0 \\ \hline 3{,}796 \qquad\quad 3{,}000 + 700 + 90 + 6 \end{array}$$

Exercise

1. Find the sum or the difference.

a) $\begin{array}{r} 4{,}503 \\ +\ 2{,}165 \\ \hline \end{array}$

$4{,}503 + 2{,}165 =$ _____

$$\begin{array}{r} 4{,}503 = 4{,}000 + 500 + 0 + 3 \\ +\ 2{,}165 = +\ 2{,}000 + 100 + 60 + 5 \\ \hline \square \qquad\quad \square + \square + \square + \square \end{array}$$

b) $\begin{array}{r} 5{,}049 \\ -\ 3{,}012 \\ \hline \end{array}$

$5{,}049 - 3{,}012 =$ _____

$$\begin{array}{r} 5{,}049 = 5{,}000 + 0 + 40 + 9 \\ -\ 3{,}012 = -\ 3{,}000 + 0 + 10 + 2 \\ \hline \square \qquad\quad \square + \square + \square + \square \end{array}$$

Unit 3.3

Mixed Problem Solving

Exercise

c)

$$\begin{array}{r} 7{,}4\,1\,6 \\ +\ 2{,}4\,5\,0 \\ \hline \end{array}$$

$7{,}4\,1\,6 + 2{,}4\,5\,0 =$ _____

$$\begin{array}{r} 7{,}4\,1\,6 = \square + \square + \square + \square \\ +\ 2{,}4\,5\,0 = + \square + \square + \square + \square \\ \hline \square + \square + \square + \square \end{array}$$

d)

$$\begin{array}{r} 8{,}3\,5\,0 \\ -\ 1{,}3\,4\,0 \\ \hline \end{array}$$

$8{,}3\,5\,0 - 1{,}3\,4\,0 =$ _____

$$\begin{array}{r} 8{,}3\,5\,0 = \square + \square + \square + \square \\ -\ 1{,}3\,4\,0 = - \square + \square + \square + \square \\ \hline \square + \square + \square + \square \end{array}$$

e)

$$\begin{array}{r} 5\,2{,}6\,9\,1 \\ +\ 3\,4{,}1\,0\,8 \\ \hline \end{array}$$

$5\,2{,}6\,9\,1 + 3\,4{,}1\,0\,8 =$ _____

$$\begin{array}{r} 5\,2{,}6\,9\,1 = \square + \square + \square + \square + \square \\ +\ 3\,4{,}1\,0\,8 = + \square + \square + \square + \square + \square \\ \hline \square + \square + \square + \square + \square \end{array}$$

f)

$$\begin{array}{r} 6\,7{,}5\,4\,2 \\ -\ 4\,3{,}5\,1\,0 \\ \hline \end{array}$$

$6\,7{,}5\,4\,2 - 4\,3{,}5\,1\,0 =$ _____

$$\begin{array}{r} 6\,7{,}5\,4\,2 = \square + \square + \square + \square + \square \\ -\ 4\,3{,}5\,1\,0 = - \square + \square + \square + \square + \square \\ \hline \square + \square + \square + \square + \square \end{array}$$

Unit 3.3

Mixed Problem Solving

Exercise

Solve the problems below.

2. Graham's mother worked 1,250 hours at Yellowstone National Park last year. This year, she worked 2,000 hours at the park. How many more hours did Graham's mother work this year than last year?

3. The sum of the greatest and smallest numbers that can be made up of five digits is

   a) 10,000+90,000 = 100,000 b) 10,000+99,999 = 109,999

   c) 11,111+99,999 = 111,110 c) 11,111+90,000 = 101,111

4. Find the difference of the greatest and smallest numbers that we can make of four digits.

5. Find the sum of 5,678 and 4,321 using vertical, horizontal, and place value pattern addition.

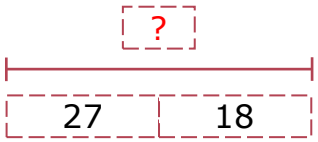
Unit 3.4

Problem Solving Using Pictures and Equations

Example

Richard is going to a basketball camp. 27 players are arriving on Saturday. Richard arrives on Monday with his team of 18 players. How many players will be at the camp altogether?

Draw a picture.



Write an equation. Use addition to solve.

i.e. 27 + 18 = 45

So, there will be 45 players at the camp.

Exercise

1. Draw a picture and write an equation to solve.

   a) There are 300 bones in a child's body. An adult human body has a total of 206 bones. How many less bones are there in an adult body than in a child's body?

   b) Two brothers Jed and Kurt went on a field trip. Jet found 46 frogs and Kurt found 104 frogs in a pond. How many frogs did the two brothers find together?

Unit 3.4

Problem Solving Using Pictures and Equations

Exercise

c) Tania spent $44 for tickets of a game and for snacks. The tickets were $26. How much did she pay for the snacks?

d) Harold is reading a comic book. He read 19 pages yesterday and 25 pages today. How many pages did Harold read in the two days?

e) Angel wants to have 30 insects in her collection. She has 17 insects. How many more insects does Angel need to collect?

f) A zoo has 36 kinds of snakes and 26 kinds of lizards. How many more kinds of snakes than lizards are in the zoo?

Unit 3.4

Problem Solving Using Pictures and Equations

Exercise

Solve the problems below.

Use the table to answer the following questions.

Name of vehicles	Number of vehicles
Motor bike	52
Car	37
Van	28
Bus	16

2. What equation can you write to help find the sum of the motorbikes and vans?

____ ◯ ____ = ____

3. How many more cars are there than buses?

a) 52 - 16 = 36

b) 37 - 28 = 9

c) 37 - 16 = 21

d) 52 - 28 = 24

4. Find the total number of vehicles using vertical and horizontal addition.

Vertical addition	Horizontal addition

Unit 3.5

Math Challenges

Exercise

1. Find the missing digits.

a)

$$\begin{array}{r} 6,\square\,5\,7 \\ +\,4,\,2\,\square\,8 \\ \hline 1\square,4\,9\,\square \end{array}$$

b)

$$\begin{array}{r} \square,\,6\,6\,9 \\ -\,3,\,\square\,7\,\square \\ \hline 1,\,0\,\square\,7 \end{array}$$

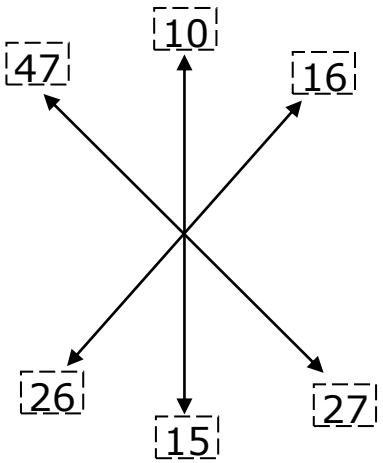
c)

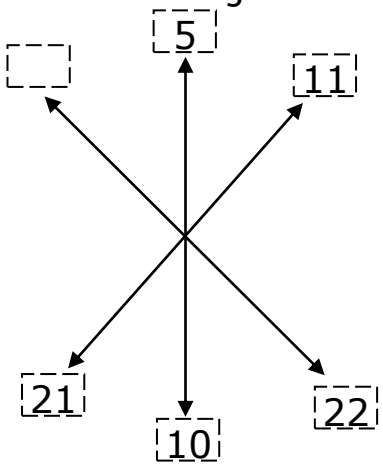
$$\begin{array}{r} 7\square,\,6\,8\,4 \\ -\,\square\,6,\,\square\,9\,6 \\ \hline 1\,7,\,3\,\square\,\square \end{array}$$

d)

$$\begin{array}{r} \square 3,\,2\,\square\,6 \\ +\,1\,8,\,\square\,9\,5 \\ \hline 1\,0\square,6\,5\,\square \end{array}$$

2. Following the pattern on the left, find the missing number on the right.





3. Find the missing number.

900,000 - 360,000 = 500,000 + _____

500,000 400,000

Exercise

4. Riya had $50. She bought a math book, a calculator, and a pen. She spent a total of $39 on the math book and the calculator. How much money did Riya have left? Identify the missing or extra information.

5. A bubble blower costs $9.29 and a snow globe that costs $4.59. Does Alex have enough money to buy two bubble blowers and three globes? Is there any missing or extra information?

6. There are 62 boys, 59 girls, and 10 teachers on the school ground. Find the total number of students. Identify any information that is not needed or that is missing.

7. Find sum or difference.

a)

$$\begin{array}{r} 375{,}416 \\ +\ 185{,}291 \\ \hline \end{array} \qquad 375,416 + 185,291 = \_\_\_\_\_$$

$$\begin{array}{r} 375{,}416 = \square + \square + \square + \square + \square + \square \\ +\ 185{,}291 = + \square + \square + \square + \square + \square + \square \\ \hline \square + \square + \square + \square + \square + \square \end{array}$$

Exercise

b)

$$\begin{array}{r} 9\,5\,3{,}2\,7\,1 \\ -\ 5\,2\,6{,}0\,8\,1 \\ \hline \end{array}$$

9 5 3,2 7 1 - 5 2 6,0 8 1 = _____

9 5 3,2 7 1 = □ + □ + □ + □ + □ + □

- 5 2 6,0 8 1 = - □ + □ + □ + □ + □ + □

□ + □ + □ + □ + □ + □

8. Read the table and answer the following questions.

Kind of animal	Number of body parts	Number of legs
Insect	3	6
Spider	2	8

a) What equation can you write to help find the sum of number of body parts of spider and number of legs of insect?

____ ◯ ____ = ____

b) What equation can you write to help find the difference of number of legs of spider and insect?

c) Oscar saw three of the same kind of animal on the side walk. He counted six body parts in all. Did he see 3 spiders or 3 insects?

Congratulations!

You have finished a lesson. You should be very proud of yourself.
Now it is time to progress to the next lesson.
Your next assignment is notated by a green arrow.

Grade 4

Answer Key of Lesson 3

Unit 3.1

1. a) 56 + 24 = 80; b) 98 - 34 = 64; c) 254 + 238 = 492; d) 879 - 526 = 353; e) 68 + 25 = 93; f) 75 - 40 = 35
   g) 358 + 233 = 591; h) 397 - 182 = 215; i) 74 + 17 = 91; j) 46 - 15 = 31; k) 643 - 241 = 402; l) 519 + 371 = 890
2. 2,000
3. c
4. 3,500; 2,000

Unit 3.2

1. a) missing information; b) 9; c) missing information; d) 27
   e) missing information; f) $20; extra information
2. 30 yrs; father's age is extra information
3. a

Unit 3.3

1. a) 6,668; b) 2,037; c) 9,866; d) 7,010; e) 86,799; f) 24,032
2. 750
3. b
4. 8,999
5. 9,999

Unit 3.4

1. a) 94; b) 150; c) $18; d) 44; e) 13; f) 10
2. 52 + 28 = 80
3. c
4. 133

Unit 3.5

1. a) 6,257 + 4,238 = 10,495; b) 4,769 - 3,672 = 1,097; c) 73,684 - 56,296 = 17,388; d) 83,256 + 18,395 = 101,651
2. 40,000
3. 40,000
4. missing information
5. missing information
6. 121; number of teachers is extra information
7. a) 560,707; b) 427,190
8. a) 2+6=8; b) 8-6=2; c) spider
