

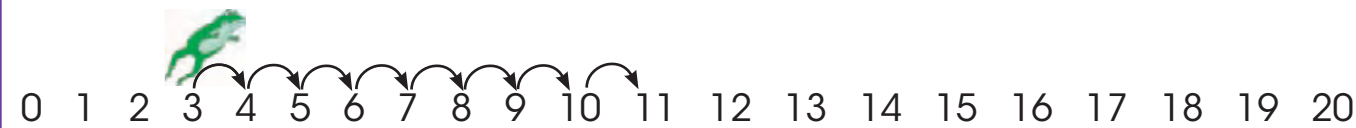
# Math Program — Grade 1

## Section 1: Number Sense

### Student Exercise: Remember

**Add — Count forwards along the Number Line.**

What is  $3 + 8 =$  \_\_\_



### Student Exercise: Vertical Addition

#### Numbers up to 10



$4 + 3 = 7$   
can be written

$$\begin{array}{r} 4 \\ + 3 \\ \hline 7 \end{array}$$

$7 + 2 = 9$   
can be written

$$\begin{array}{r} \square \\ + \square \\ \hline \square \end{array}$$

$6 + 3 = 9$   
can be written

$$\begin{array}{r} \square \\ + \square \\ \hline \square \end{array}$$

#### Numbers over 10



tens ones  
18  
 $+ 1$   
 $\square$

tens ones  
13  
 $+ 6$   
 $\square$

tens ones  
16  
 $+ 3$   
 $\square$

tens ones  
11  
 $+ 8$   
 $\square$

tens ones  
15  
 $+ 4$   
 $\square$

## Section 1: Number Sense

### Numbers over 20

tens ones  
21  
 $+ 8$   
 $\square$

tens ones  
27  
 $+ 2$   
 $\square$

tens ones  
32  
 $+ 6$   
 $\square$

tens ones  
56  
 $+ 1$   
 $\square$

tens ones  
85  
 $+ 4$   
 $\square$

### Higher Numbers

tens ones  
36  
 $+ 13$   
49

tens ones  
51  
 $+ 33$   
 $\square$

tens ones  
43  
 $+ 26$   
 $\square$

tens ones  
74  
 $+ 11$   
 $\square$

tens ones  
64  
 $+ 34$   
 $\square$

### A Problem to Solve

Russ has some coins in his money box.

He has 2 dimes, 5 nickels and 2 cents.

How much money does he have altogether?  $\square$

Are you going to  $\square$  Add + or  $\square$  Subtract - ?

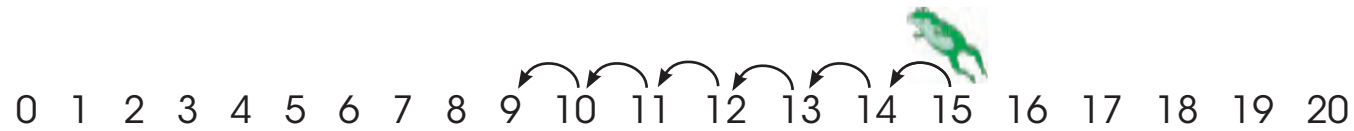
*(Subtract means take away)*

Section 1: Number Sense

**Student Exercise:**  
**Remember**

**Subtracting — Counting Backwards along the Number Line.**

What is  $15 - 6 =$  \_\_\_\_\_



**Student Exercise:**  
**Crossing Out**

**Cross out the ones that are taken away.**

7 sheep are in a pen, the farmer takes 3 away.



Cross out the sheep that are taken away.

Write the subtraction sentence  $7 - 3 = 4$

6 kittens, 2 are taken away.



Cross out the 2 that are taken away.

Write the subtraction sentence \_\_\_\_\_

9 birds, 7 fly away.



Cross out the 7 that flew away.

Write the subtraction sentence \_\_\_\_\_

Section 1: Number Sense

**Match the pictures to the answers.**

	$9 - 4 = 5$
	$10 - 3 = 7$
	$6 - 5 = 1$
	$8 - 5 = 3$
	$7 - 1 = 6$

**The difference between.**

To find the difference between 2 numbers, take the smaller number from the larger number. The difference between them is the answer.

10 coins 	The difference between is 4 $10 - 6 = 4$	6 coins 
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Did you  Add + or  Subtract - ?

## Section 1: Number Sense

**Now do these.** Stack cubes if you need some help.

Find the difference between 9 books and 5 books.



The difference between is



$$9 - 5 = \square$$

**Find the difference.**

You can draw a picture, make a model or use the number line to help you.



Matt has 11 books. Harry has 7 books.  
What is the difference between 11 and 7?

Answer:

Add + or  Subtract -



Joe has 9 cards. He gives 4 of them away.  
How many does he have now?  
What is the difference between 9 and 4?

Answer:

Add + or  Subtract -



There are 10 parrots in a tree. There are 18 parrots in another tree.  
What is the difference between 18 and 10?

Answer:

Add + or  Subtract -

## Section 1: Number Sense



What is the difference between 10 cents and 1 cent?

Answer:

Add + or  Subtract -



A kite costs 12 cents.



A ball costs 16 cents

What is the difference between the costs?

Answer:

Add + or  Subtract -

**What is the difference between these numbers?**

Circle the answer.

$$8 - 4 = \quad 4 \quad 3 \quad 2 \quad 1$$

$$7 - 5 = \quad 1 \quad 4 \quad 2 \quad 3$$

$$6 - 1 = \quad 1 \quad 4 \quad 2 \quad 5$$

$$9 - 8 = \quad 7 \quad 1 \quad 5 \quad 4$$

Section 1: Number Sense

Remember Number Groups.

**7, 5, 2**  
 $2 + 5 = 7$   
 $7 - 2 = 5$   
 $5 + 2 = 7$   
 $7 - 5 = 2$

**6, 2, 4**  
 $6 - 4 = 2$   
 $6 - 2 = 4$   
 $4 + 2 = 6$   
 $2 + 4 = 6$

**7, 6, 1**  
 $7 - 1 = 6$   
 $7 - 6 = 1$   
 $1 + 6 = 7$   
 $6 + 1 = 7$

Write some addition and subtraction number sentences for these number families.

**5, 3, 2**

**4, 5, 9**

**3, 2, 1**

**7, 3, 10**

$\square + \square = \square$   
 $\square + \square = \square$   
 $\square - \square = \square$   
 $\square - \square = \square$

$\square + \square = \square$   
 $\square + \square = \square$   
 $\square - \square = \square$   
 $\square - \square = \square$

$\square + \square = \square$   
 $\square + \square = \square$   
 $\square - \square = \square$   
 $\square - \square = \square$

$\square + \square = \square$   
 $\square + \square = \square$   
 $\square - \square = \square$   
 $\square - \square = \square$

Student Exercise:  
Vertical Subtraction

Numbers up to 10



$5 - 2 =$   
can be written

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



$6 - 3 =$   
can be written

$$\begin{array}{r} \square \\ - \square \\ \hline \square \end{array}$$



$9 - 7 =$   
can be written

$$\begin{array}{r} \square \\ - \square \\ \hline \square \end{array}$$

Numbers over 10

$15 - 5 = 10$

take away  
↓

$13 - 2 = 11$

$\begin{array}{r} 13 \\ - 2 \\ \hline 11 \end{array}$  take away  
↓

Section 1: Number Sense

Numbers over 10 continued.

tens ones  
13  
 $- 1$   
**12**

tens ones  
15  
 $- 3$   
 $\square$

tens ones  
17  
 $- 5$   
 $\square$

tens ones  
18  
 $- 8$   
 $\square$

tens ones  
19  
 $- 6$   
 $\square$

Numbers over 20

tens ones  
29  
 $- 7$   
**22**

tens ones  
38  
 $- 5$   
 $\square$

tens ones  
48  
 $- 7$   
 $\square$

tens ones  
55  
 $- 5$   
 $\square$

tens ones  
78  
 $- 7$   
 $\square$

Higher Numbers

Remember to line up the digits.  
Remember the bigger number goes on top.  
Subtract the ones first, then subtract the tens.  
Put your answers under the line.

tens ones  
44  
 $- 12$   
**32**

tens ones  
84  
 $- 22$   
 $\square$

tens ones  
46  
 $- 23$   
 $\square$

tens ones  
39  
 $- 25$   
 $\square$

tens ones  
59  
 $- 48$   
 $\square$

How many more?



Jess has 16 stamps for her letters.  
She needs stamps for 20 letters.  
How many more stamps does she need?

Answer:  $\square$   
 Add + or  $\square$  Subtract -

## Section 1: Number Sense



Mrs Digwell needs 25 bulbs to plant in her garden.  
She only has 21 bulbs.  
How many more bulbs does she need?

Answer: \_\_\_\_\_  
 Add + or  Subtract -



Leila had 12 pears.  
She gave 3 of them away.  
2 of them were bad, she threw them away.  
How many pears did she have left?

Answer: \_\_\_\_\_  
 Add + or  Subtract -



There were 17 pencils in the box.  
The teacher gave out 10 of them and then she gave  
out another 2.  
How many pencils were left in the box?

Answer: \_\_\_\_\_  
 Add + or  Subtract -

*Work these problems out.  
Try and work them out in your head.  
There are different ways that you can do this.*

## Section 1: Number Sense

Here are some more to try. Count on or count back.

$$12 - 8 = \underline{\quad} \quad 17 - 8 = \underline{\quad} \quad 18 - 11 = \underline{\quad} \quad 13 - 11 = \underline{\quad}$$

**For larger numbers, take the tens away first.**

For example  $48 - 35$   
 $= 4 \text{ tens} - 3 \text{ tens} = \mathbf{10}$  then do  $8 - 5 = \mathbf{3}$  then add 10 and 3 =  $\mathbf{13}$

**Now do these.**

$$29 - 12 = \underline{\quad} \quad 48 - 16 = \underline{\quad} \quad 55 - 22 = \underline{\quad}$$

**Adding or Subtracting zero.**

If you add nothing or take nothing away the number remains the same.



$$9 \text{ pigs} + 0 \text{ pigs} = 9 \text{ pigs}$$



$$12 \text{ frogs} + 0 \text{ frogs} = \text{Answer: } \underline{\quad}$$



$$16 \text{ cats} + 0 \text{ cats} = \text{Answer: } \underline{\quad}$$



$$15 \text{ worms} + 0 \text{ worms} = \text{Answer: } \underline{\quad}$$

## Section 1: Number Sense



12 gloves - 0 gloves = 12 gloves.



14 coats - 0 coats =

Answer: \_\_\_\_\_



19 socks - 0 socks =

Answer: \_\_\_\_\_



16 hats - 0 hats =

Answer: \_\_\_\_\_

## Section 1: Number Sense

### Student Exercise: Finding the Sum of Three One Digit Numbers



Add 1 hat +

2 hats +

3 hats

= 1

+

2

+

3

= 6 hats

Now do these number sentences:

Add 3 + 4 + 2 =

Answer: \_\_\_\_\_

Add 4 + 1 + 5 =

Answer: \_\_\_\_\_

Add 6 + 3 + 5 =

Answer: \_\_\_\_\_

Add 7 + 5 + 6 =

Answer: \_\_\_\_\_

Vertical Addition with 3 digits; 4 + 3 + 2

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

$$\begin{array}{r} 5 \\ 1 \\ + 2 \\ \hline \square \end{array}$$

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

$$\begin{array}{r} 6 \\ 2 \\ + 1 \\ \hline \square \end{array}$$