

# YEAR 1 MATHS

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Term 6 Week 2

# Mathletics and Professor Assessor

This week we have set some number bonds activities for children to try on Mathletics: <https://www.mathletics.com/uk/>

We have also set a 5 times tables test on Professor Assessor: [www.prof123.co.uk/](http://www.prof123.co.uk/)

Later in the week (from Friday 12<sup>th</sup> June) there will also be a number bonds assessment for children to try on Professor Assessor.

You will have 1 week to complete each of these tasks. All of this will help us to know how you are getting on with your learning.

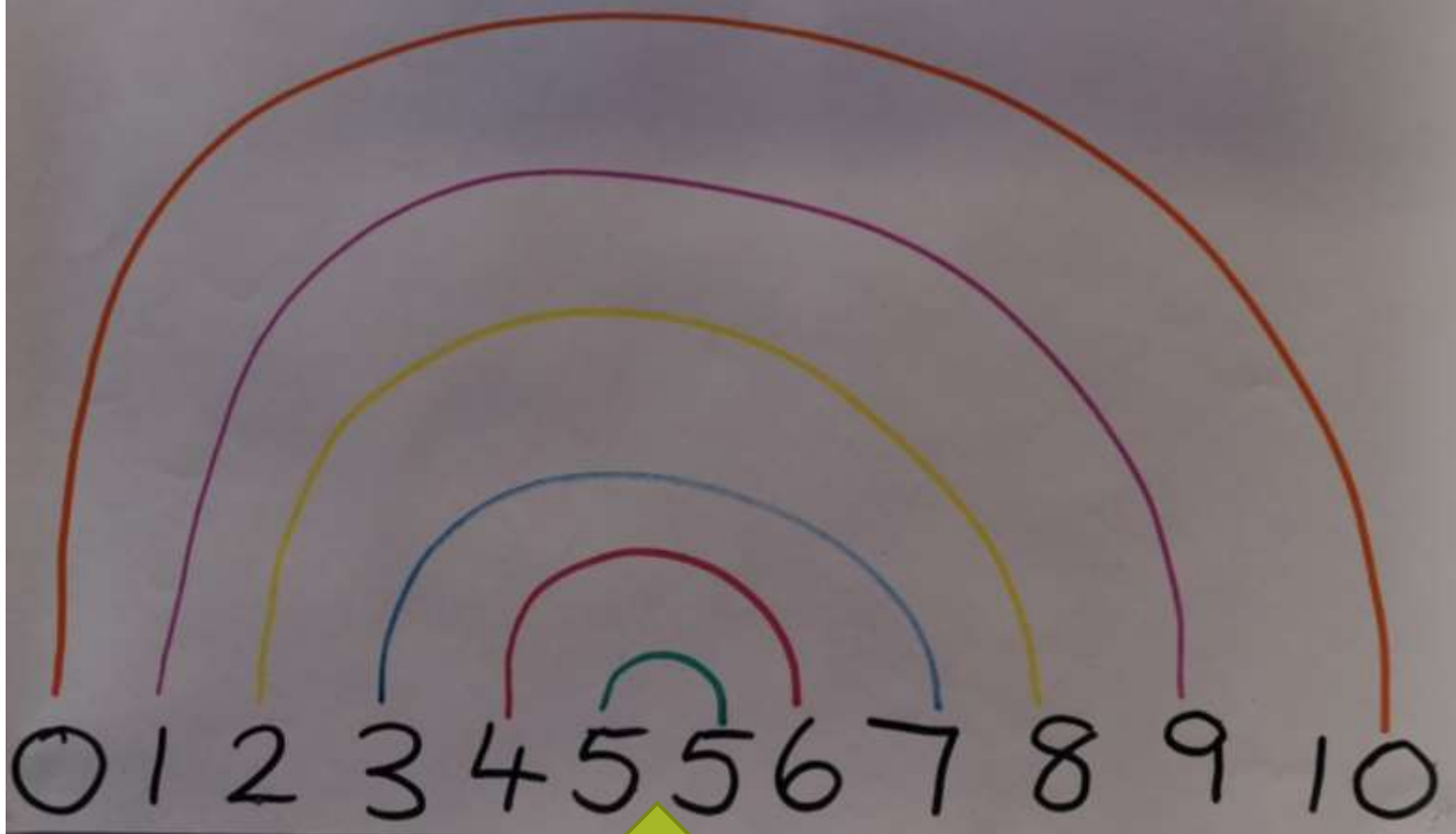
# This week – Number Bonds and Problems

- Each session should take about 45 minutes.
- This week we are focusing on:
- **Lesson 1** – Number bonds to 10.
- **Lesson 2** – Number bonds to 20.
- **Lesson 3** – Subtraction facts for 10 and 20 using number bonds.
- **Lesson 4** – Missing symbols problems.
- **Lesson 5** – Missing numbers problems.

# Session 1 – Number Bonds to 10

- In this session we are going to recap our number bonds to 10.
- First, look at Mrs Janman's number bonds to 10 'rainbow poster' on the next page. Can you create your own?
- On the page after this are some missing number calculations. Can you work out what to add each time to make the answer 10?
- On the following page are some links to different number bonds online games. Please make sure you choose number bonds to 10 each time. Even if you feel confident with these bonds, we would still like you to practise them in order to increase your speed of recall.
- After this, we would like you to try some of the triangular cards problems on the final page of session 1.

Bonds to 10.



Remember to write two number 5's in the middle!

# Session 1 – Number Bonds to 10

$10 + \_ = 10$	$\_ + 9 = 10$
$2 + \_ = 10$	$3 + \_ = 10$
$\_ + 6 = 10$	$\_ + 1 = 10$
$8 + \_ = 10$	$3 + 7 = \_$
$5 + \_ = 10$	$\_ + 0 = 10$
$7 + \_ = 10$	$\_ + 7 = 10$

For an extra challenge try these word problems.

Sarah had 4 sweets and Lucy had \_\_\_ sweets. They have 10 sweets altogether.

How many sweets did Lucy have?



If I had 5 merits but I needed 10 for a certificate, how many more would I need to get?



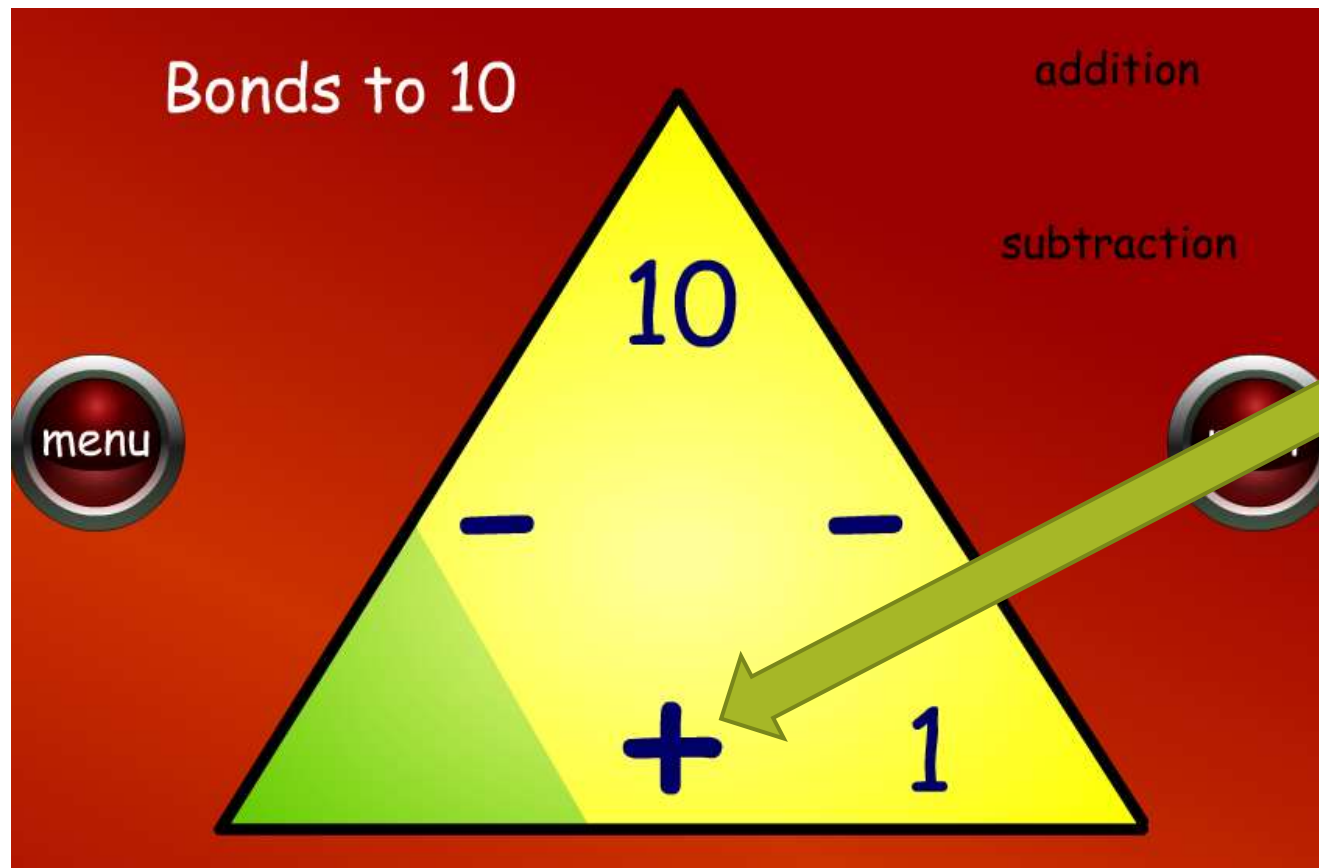
There were 8 children on the climbing frame. Some more got on. Now there are 10 children. How many more got on?

# Session 1 – Number Bonds to 10

- Below are a selection of online games for practising number bonds. Remember to select bonds to 10 each time.
- Hit the button: <https://www.topmarks.co.uk/maths-games/hit-the-button>
- Funky Mummy: <http://www.ictgames.com/funkyMummy/index.html>
- Save the Whale: <https://www.ictgames.com/saveTheWhale/index.html>
- Number Bonds – Make 10:  
[https://www.mathplayground.com/number\\_bonds\\_10.html](https://www.mathplayground.com/number_bonds_10.html)
- Calculation Balance: <https://www.topmarks.co.uk/Flash.aspx?f=CalcBalancev5>

# Session 1 – Number Bonds to 10

Can you work out what the number in the bottom left corner should be?



Helpful Hint: What would we add to 1 to make 10?

Answer on the next page.



# Session 1 – Number Bonds to 10

Bonds to 10

addition

subtraction

10

9 + 1

- -

menu next

# Session 1 – Number Bonds to 10

Can you work out what the number in the bottom right corner should be?

Bonds to 10

addition

subtraction

10

6

+

-

-

menu

next

Answer on the next page.

# Session 1 – Number Bonds to 10

Bonds to 10

addition

subtraction

10

6 + 4

menu

next

# Session 1 – Number Bonds to 10

- To play this 'Triangular Cards' game please click on this link:  
<https://www.topmarks.co.uk/Flash.aspx?f=triangularcardsv4>
- You will need to click on the 'Bonds to ... number ?' box shown below and then type in '10'.



Type 10 in here.

# Session 2 – Number Bonds to 20

- Today we are going to think about number bonds to 20.
- Please start by watching this number bonds to 20 song:  
<https://www.youtube.com/watch?v=4EsPtTkwNlo>
- Then we would like you to try the activities on the next page.
- On the following slide there are some links to number bonds to 20 online games. Please remember to select bonds to 20. Even if you feel confident with these bonds, we would still like you to practise them in order to increase your recall speed of these facts.
- On the final slide of session 2 there is a bonds to 20 problem to solve.

# Session 2 – Number Bonds to 20

Find and circle number bonds to 20. Use a different colour each time.

20	4	11	13	7	13	20	8	15	5
0	9	12	3	14	19	1	13	0	4
0	11	8	17	15	9	2	7	16	16
10	9	6	9	10	11	17	7	7	3
12	8	14	6	10	18	18	3	13	4
19	3	20	0	12	8	2	6	5	6
5	15	1	17	1	20	16	4	3	14
6	2	0	3	1	2	18	2	1	19

Bonds to 20

$0 + \underline{\quad} = 20$

$1 + \underline{\quad} = 20$

$2 + \underline{\quad} = 20$

$3 + \underline{\quad} = 20$

$4 + \underline{\quad} = 20$

$5 + \underline{\quad} = 20$

$6 + \underline{\quad} = 20$

$7 + \underline{\quad} = 20$

$8 + \underline{\quad} = 20$

$9 + \underline{\quad} = 20$

$10 + \underline{\quad} = 20$

# Session 2 – Number Bonds to 20

- Below are a selection of online games for practising number bonds. Remember to select bonds to 20 each time.
- Hit the button: <https://www.topmarks.co.uk/maths-games/hit-the-button>
- Funky Mummy: <http://www.ictgames.com/funkyMummy/index.html>
- Maths Line: [https://www.mathplayground.com/number\\_bonds\\_20.html](https://www.mathplayground.com/number_bonds_20.html)
- Calculation Balance: <https://www.topmarks.co.uk/Flash.aspx?f=CalcBalancev5>
- Bingo – Make Amounts:  
<https://www.whitleyabbeyprimary.co.uk/gordonsfacts.html>

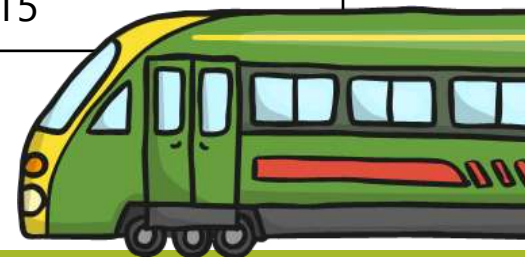


# Session 2 – Number Bonds to 20

## Off on a Trip

- I have £20. I would like to go on two journeys. Where could I visit? How much would it cost altogether to visit both of your chosen places?

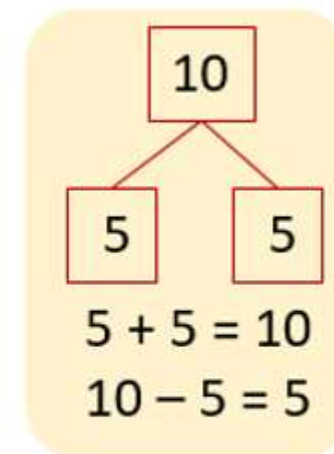
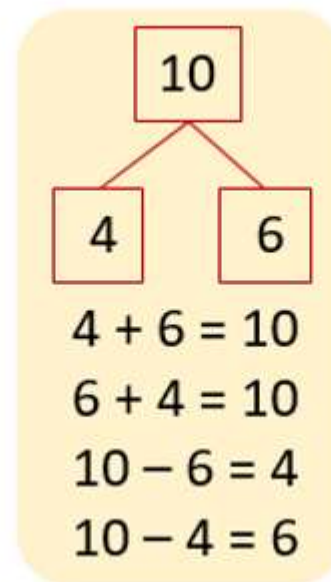
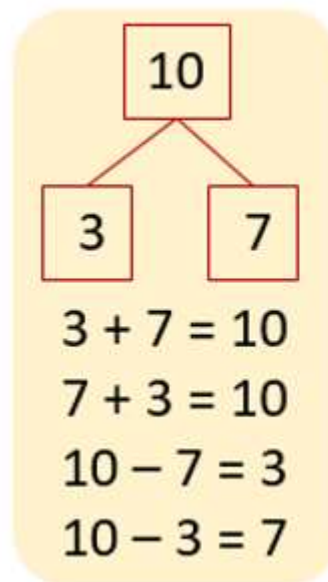
Destination	Price
London	£14
Birmingham	£11
Glasgow	£5
Edinburgh	£9
Dublin	£6
Cardiff	£15





## Session 3 – Subtraction facts for 10 and 20 using number bonds.

- Today we are going to think about how we can use our knowledge of number bonds to subtract mentally.
- Please start by watching this video:  
[https://www.youtube.com/watch?v=L\\_1gwP8m2JM](https://www.youtube.com/watch?v=L_1gwP8m2JM)
- Next look through the posters below. Can you see the links between the addition and subtraction facts?



- On the next page are some number bond subtraction questions to try.

# Session 3 – Subtraction facts for 10 and 20 using number bonds.

A number bond diagram for 10. The top circle is orange and contains the number 10. Two lines connect it to two bottom circles. The left circle is purple and contains the number 9. The right circle is green and is empty, with a horizontal line across its center.

$9 + \underline{\quad} = 10$   
 $\underline{\quad} + 9 = 10$   
 $10 - 9 = \underline{\quad}$   
 $10 - \underline{\quad} = 9$

A number bond diagram for 10. The top circle is orange and contains the number 10. Two lines connect it to two bottom circles. The left circle is purple and contains the number 6. The right circle is green and is empty, with a horizontal line across its center.

$6 + \underline{\quad} = 10$   
 $\underline{\quad} + 6 = 10$   
 $10 - 6 = \underline{\quad}$   
 $10 - \underline{\quad} = 6$

A number bond diagram for 10. The top circle is orange and contains the number 10. Two lines connect it to two bottom circles. The left circle is purple and contains the number 0. The right circle is green and is empty, with a horizontal line across its center.

$0 + \underline{\quad} = 10$   
 $\underline{\quad} + 0 = 10$   
 $10 - 0 = \underline{\quad}$   
 $10 - \underline{\quad} = 0$

A number bond diagram for 10. The top circle is orange and contains the number 10. Two lines connect it to two bottom circles. The left circle is purple and contains the number 8. The right circle is green and is empty, with a horizontal line across its center.

$8 + \underline{\quad} = 10$   
 $\underline{\quad} + 8 = 10$   
 $10 - 8 = \underline{\quad}$   
 $10 - \underline{\quad} = 8$

- On the next page are some number bonds to 20 subtraction questions to try next.

## Session 3 – Subtraction facts for 10 and 20 using number bonds.

- Insert the missing numbers in the number sentences.

20	-	13	=	
20	-	11	=	
20	-	3	=	
20	-		=	2
20	-		=	5
20	-	6	=	

20	-	9	=	
20	-	14	=	
20	-		=	16
20	-		=	10
20	-	8	=	
20	-	2	=	

- As an extra challenge you could try this quiz:

<https://www.educationquizzes.com/ks1/maths/year-1-numbers-number-bonds-to-20/>

# Session 4 – Missing symbols problems.

- Today we are going to recap missing symbols problems.
- Each of these calculations is either missing the + or – symbol.

$$5 \square 3 = 8$$

$$9 \square 6 = 3$$

- To work out which it should be you will need to follow these rules:
  - If the answer is bigger than both the numbers in the calculation then they have been added together.
  - If the answer is smaller than the first number then the missing symbol is subtract.

$$5 \square + \square 3 = 8$$

8 is bigger than 5 or 3 so this is add.

$$9 \square - \square 6 = 3$$

3 is smaller than 9 so this is subtract.

# Session 4 – Missing symbols problems.

- Once you have decided which symbol is missing, please check your answer using your number line. For example, if the question is  $5 + 3 = 8$ , then use your number line to do  $5 + 3$  and if the answer you land on is 8 then you have chosen the correct symbol.
- On the next 2 pages are 2 missing symbol activities set at different challenge levels. Please work with an adult to choose the appropriate level.
- Remember: Use your number line (from your home learning pack) to check the calculation has the correct symbol. (There is a printable 0-100 number line on the last page of this document if needed.)

# Session 4 – Missing symbols problems.

## Missing Symbols 1

Identify the missing symbol in each of these.

$4 \square 4 = 8$

$6 \square 3 = 9$

$7 \square 3 = 10$

$8 \square 5 = 3$

$6 \square 1 = 5$

$11 \square 1 = 10$

$10 \square 3 = 7$

$12 \square 2 = 14$

$5 \square 5 = 10$

$9 \square 8 = 1$

$8 \square 6 = 2$

$0 \square 8 = 8$

$7 \square 4 = 11$

$13 \square 7 = 6$

$12 \square 0 = 12$

$5 \square 10 = 15$

$10 + \square = 16$

$14 \square 4 = 10$

# Session 4 – Missing symbols problems.

## Missing Symbols 2

Identify the missing symbols in each of these.

$24 \square 8 = 32$

$46 \square 16 = 30$

$17 \square 11 = 28$

$20 \square 8 = 28$

$45 \square 10 = 35$

$53 \square 10 = 63$

$34 \square 14 = 20$

$34 \square 10 = 24$

$25 \square 15 = 40$

$62 \square 8 = 70$

$19 \square 20 = 39$

$55 \square 0 = 55$

$34 \square 16 = 50$

$57 \square 20 = 37$

$39 \square 8 = 31$

$75 \square 16 = 59$

$40 \square 12 = 52$

$30 \square 0 = 30$

# Session 5 –Missing number problems.

- Today we would like you to start by completing the Number Bonds Assessment on Professor Assessor: [www.prof123.co.uk/](http://www.prof123.co.uk/)
- This has been set from Friday 12<sup>th</sup> June and you will have 1 week to complete the test. This will help us to know how you are getting on with your learning.
- After this, we would like you to try some missing number problems.
- The next few slides will take you through some examples.



# Session 5 –Missing number problems.

- Here is an example of a number sentence with one of the numbers missing:

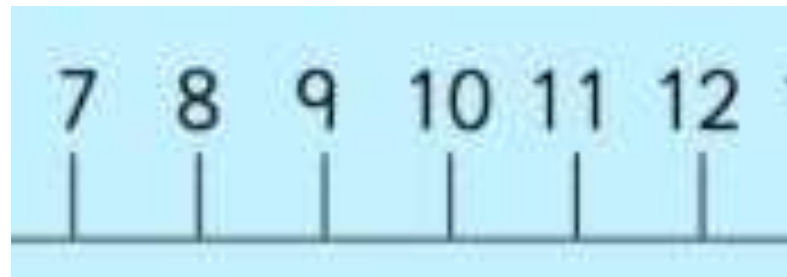
$$7 + \square = 12$$

- Please talk with an adult about how you think you could find out what the missing number should be.
- **The answer can be found on the next page.**

## Session 5 –Missing number problems.

$$7 + \square = 12$$

- To find the answer you need to work out how much more must be added to 7 to make the answer of 12.
- You could do this by counting how many jumps there are on a number line between 7 and 12.



- What answer did you get? (Please turn to the next page.)

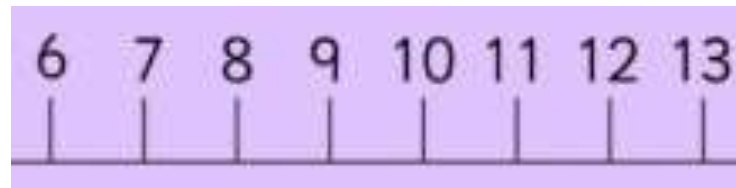
## Session 5 –Missing number problems.

$$7 + \boxed{5} = 12$$

- Now please try this one:

$$13 - \boxed{\phantom{00}} = 6$$

- Again, you need to find the difference between 13 and 6.
- Use this number line to try this:



- Turn to the next page for the answer.

# Session 5 –Missing number problems.

$$13 - \boxed{7} = 6$$

- Lastly, there are 3 activities set at 3 different challenge levels to try. Please work with an adult to choose the appropriate level for you.
- There is a printable 0-100 number line on the last page of this document if needed.

# Missing Number Calculations With Number Line

Example	
$\underline{3} + ? = \textcircled{7} \quad ? = 4$	<p>A number line from 1 to 12. Tick marks are labeled 1 through 12. Three curved arrows (jumps) are drawn above the line, starting at 3 and ending at 4, 4 and 5, and 5 and 6. The number 7 is circled below the tick mark for 7.</p>
$3 + \underline{\quad} = 5$	<p>A number line from 1 to 12 with tick marks labeled 1 through 12.</p>
$5 - \underline{\quad} = 3$	<p>A number line from 1 to 12 with tick marks labeled 1 through 12.</p>
$2 + \underline{\quad} = 6$	<p>A number line from 1 to 12 with tick marks labeled 1 through 12.</p>
$6 - \underline{\quad} = 2$	<p>A number line from 1 to 12 with tick marks labeled 1 through 12.</p>
$2 + \underline{\quad} = 3$	<p>A number line from 1 to 12 with tick marks labeled 1 through 12.</p>

# Missing Number Calculations With Number Line

Example	
$3 + ? = 7$ $? = 4$	
$6 + \underline{\quad} = 11$	
$12 - \underline{\quad} = 6$	
$\underline{\quad} + 4 = 11$	
$11 - \underline{\quad} = 5$	
$3 + \underline{\quad} = 11$	

## Missing Number Problems

1)  $12 + \underline{\quad} = 15$

7)  $20 - \underline{\quad} = 8$

2)  $17 + \underline{\quad} = 25$

8)  $22 - \underline{\quad} = 19$

3)  $\underline{\quad} + 8 = 18$

9)  $34 - \underline{\quad} = 26$

4)  $\underline{\quad} + 43 = 49$

10)  $13 = \underline{\quad} - 2$

5)  $52 = 44 + \underline{\quad}$

11)  $75 = 79 - \underline{\quad}$

6)  $44 = \underline{\quad} + 28$

12)  $\underline{\quad} - 13 = 33$

# My 0 to 100 Number Line



0 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



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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



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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



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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



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