

Reasoning and Problem Solving

Step 4: Subtraction – Not Crossing 10

National Curriculum Objectives:

Mathematics Year 1: (1N4) [Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than \(fewer\), most, least](#)

Mathematics Year 1: (1N2c) [Read and write numbers from 1 to 20 in numerals and words](#)

Mathematics Year 1: (1C4) [Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as \$7 = - 9\$](#)

Differentiation:

Questions 1, 4 and 7 (Reasoning)

Developing Identify if the calculation is correct when using a number line (numbers within 20). Numerals only. Pictorial support for all questions.

Expected Identify if the calculation is correct when using a number line (numbers within 20). Numerals only. Some pictorial support.

Greater Depth Identify if the calculation is correct when using a number line (within 20). Numerals and words. Limited pictorial support. Questions include some two-step problems.

Questions 2, 5 and 8 (Problem Solving)

Developing Write a subtraction calculation to match the image (numbers within 20). Numerals only. Pictorial support for all questions.

Expected Write a subtraction calculation to match the image (numbers within 20). Numerals only. Some pictorial support.

Greater Depth Write a subtraction calculation to match the image (within 20). Numerals and words. Limited pictorial support. Questions include some two-step problems.

Questions 3, 6 and 9 (Problem Solving)

Developing Choose the correct digit cards to complete the number sentence (numbers within 20). Numerals only. Pictorial support for all questions.

Expected Choose the correct digit cards to complete the number sentence (numbers within 20). Numerals only. Some pictorial support.

Greater Depth Choose the correct digit cards to complete the number sentence when subtracting two numbers (numbers within 20). Numerals and words. Limited pictorial support. Questions include some two-step problems.

More [Year 1 Addition and Subtraction](#) resources.

Did you like this resource? Don't forget to [review](#) it on our website.

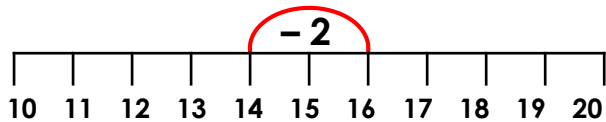
Subtraction – Not Crossing 10

Subtraction – Not Crossing 10

1a. Jen has written a number sentence to describe the image below.



$$16 - 2 = 14$$



Is she correct? Prove it.

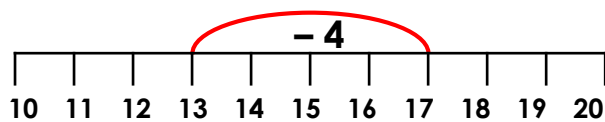


R

1b. Mo has written a number sentence to describe the image below.



$$17 - 4 = 14$$



Is he correct? Prove it.



R

2a. Nia has 18 stars. She hides 2 stars.



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

Write a subtraction sentence to show this.



PS

2b. Mark has 17 socks. He throws 3 away.



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

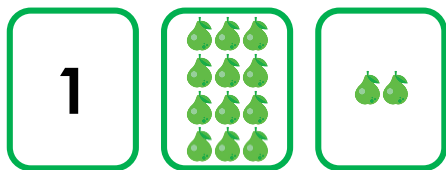
Write a subtraction sentence to show this.



PS

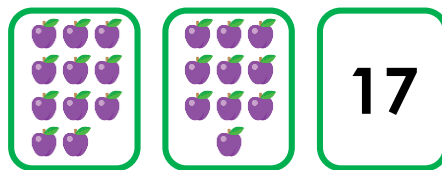
3a. Choose the correct cards to complete the number sentence.

$$\square - \square = \boxed{11}$$



3b. Choose the correct cards to complete the number sentence.

$$\square - \boxed{1} = \square$$



PS



PS

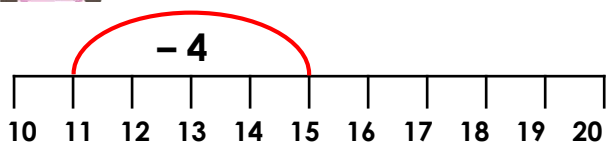
Subtraction – Not Crossing 10

Subtraction – Not Crossing 10

4a. Rose has written a number sentence to describe the image below.



$$15 - 4 = 12$$



Is she correct? Prove it.

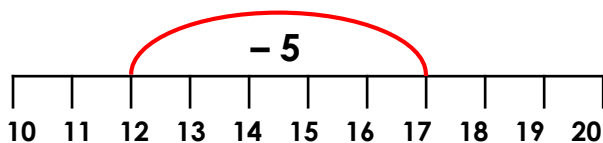


R

4b. Milo has written a number sentence to describe the image below.



$$17 - 5 = 12$$



Is he correct? Prove it.



R

5a. Pam has 12 cakes. She eats 2 cakes.



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

Write a subtraction sentence to show this.



PS

5b. Bob has 13 gifts. He gives 3 gifts away.



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

Write a subtraction sentence to show this.

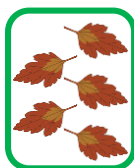


PS

6a. Choose the correct cards to complete the number sentence.

$$\square - \square = \boxed{12}$$

17



8

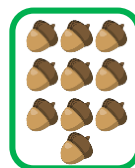


PS

6b. Choose the correct cards to complete the number sentence.

$$\square - \boxed{3} = \square$$

15



12



PS

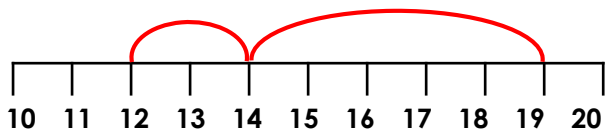
Subtraction – Not Crossing 10

Subtraction – Not Crossing 10

7a. Tina has written a number sentence to describe the image below.



$$19 - \text{five} - 2 = \text{twelve}$$



Is she correct? Prove it.



R

7b. Kip has written a number sentence to describe the image below.



$$\text{seventeen} - 3 = 13$$



Is he correct? Prove it.



R

8a. Riz has twenty keys. She lost 1 and hid 2.



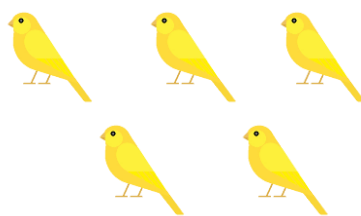
$$\square - \square - \square = \square$$

Write a subtraction sentence to show this.



PS

8b. TJ has eighteen mice. 4 run away and 1 is sold.



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

Write a subtraction sentence to show this.



PS

9a. Choose the correct cards to complete the number sentence.

$$17 - \square - 2 = \square$$



PS

9b. Choose the correct cards to complete the number sentence.

$$16 - \square - 4 = \square$$



PS

Reasoning and Problem Solving Subtraction – Not Crossing 10

Developing

1a. **Yes; the calculation matches the number line.**

2a. $18 - 2 = 16$

3a. $\underline{12} - \underline{1} = 11$

Expected

4a. **No; Rose has subtracted 3, not 4.**

5a. $12 - 2 = 10$

6a. $\underline{17} - \underline{5} = 12$

Greater Depth

7a. **Yes; the calculation matches the number line.**

8a. $20 - 1 - 2 = 17$

9a. $17 - \underline{\text{five}} - 2 = \underline{\text{ten}}$

Reasoning and Problem Solving Subtraction – Not Crossing 10

Developing

1b. **No; Mo has subtracted 3, not 4.**

2b. $17 - 3 = 14$

3b. $\underline{11} - 1 = \underline{10}$

Expected

4b. **Yes; the calculation matches the number line.**

5b. $13 - 3 = 10$

6b. $\underline{15} - 3 = \underline{12}$

Greater Depth

7b. **No; Kip has only subtracted 3, not the extra 1.**

8b. $18 - 4 - 1 = 13$

9b. $16 - \underline{\text{one}} - 4 = \underline{11}$