

# Homework/Extension

## Step 7: Related Facts

### National Curriculum Objectives:

Mathematics Year 1: (1C2a) [Add and subtract one-digit and two-digit numbers to 20, including zero](#)

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 (Varied Fluency)

**Developing** Use the bar model to complete the related facts. Labelled bar model provided.

**Expected** Label the bar model and complete the related facts. Part labelled bar model provided.

**Greater Depth** Label the bar model and complete the related facts. Blank bar model provided.

Questions 2, 5 and 8 (Varied Fluency)

**Developing** Recognise the related facts and match the inverse calculations. Ten frames provided as support.

**Expected** Recognise the related facts and match the inverse calculations. No pictorial support provided.

**Greater Depth** Recognise the related facts to complete the calculations and match to the inverse. No pictorial support provided.

Questions 3, 6 and 9 (Reasoning and Problem Solving)

**Developing** Explain which statement is correct when recognising related facts. Images provided to support.

**Expected** Explain which statement is correct when recognising related facts. Part-whole model provided to support.

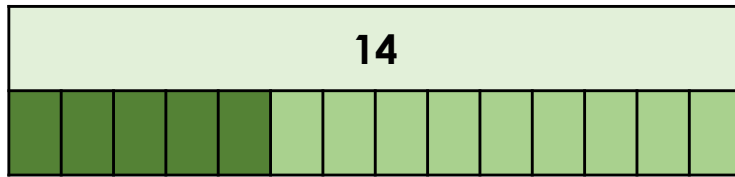
**Greater Depth** Explain which statement is correct when recognising related facts. Digit cards provided to support.

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

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

# Related Facts

1. Complete the calculations using the bar model below.



A.  + 9 = 14

B. 9 + 5 =

C. 14 -  = 5

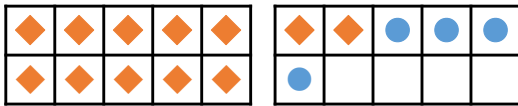
D.  - 5 = 9



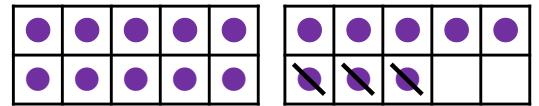
VF  
HW/Ext

2. Match each calculation to the inverse.

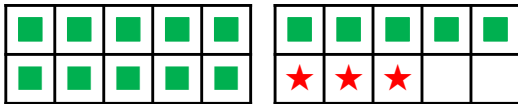
A.  $12 + 4 = 16$



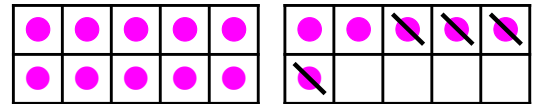
1.  $18 - 3 = 15$



B.  $15 + 3 = 18$



2.  $16 - 4 = 12$



VF  
HW/Ext

3. Max and Alina are looking at the fruit below.



Max says,



I can write 2 calculations about the fruit.

Alina says,



I can write 4 calculations about the fruit.

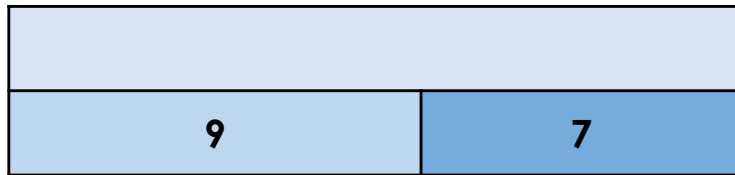
Who is correct? Explain your answer.



RPS  
HW/Ext

## Related Facts

4. Complete the calculations and the bar model below.



A.  $\square + \square = 16$

B.  $7 + \square = \square$

C.  $\square - 9 = \square$

D.  $16 - \square = \square$



VF  
HW/Ext

5. Match each calculation to the inverse.

A.  $9 + 7 = 16$

B.  $6 + 8 = 14$

C.  $9 + 5 = 14$

1.  $14 - 8 = 6$

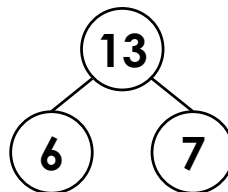
2.  $16 - 7 = 9$

3.  $14 - 5 = 9$



VF  
HW/Ext

6. Jess and Ben are looking at the part-whole model below.



Jess says,



I can write 1 calculation using the part-whole model.

Ben says,



I can write 4 calculations using the part-whole model.

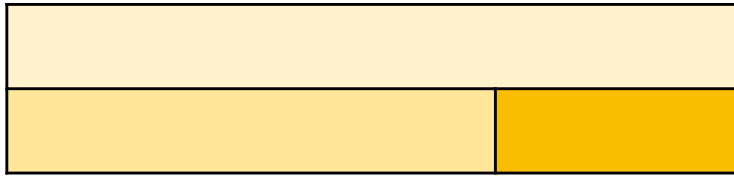
Who is correct? Explain your answer.



RPS  
HW/Ext

## Related Facts

7. Complete the calculations and label the bar model below.



A.  $4 + \square = \square$

B.  $\square + \square = 12$

C.  $\square - 8 = \square$

D.  $12 - \square = \square$



VF  
HW/Ext

8. Complete each calculation and match it to the inverse.

A.  $\square + 6 = 13$

B.  $11 + 7 = \square$

C.  $4 + \square = 16$

1.  $\square - 7 = 6$

2.  $\square - 4 = 12$

3.  $18 - \square = 7$



VF  
HW/Ext

9. Rex and Ruth are looking at the digit cards below.

17

9

8

Rex says,



I can write 2 subtractions and 2 additions using the digit cards.

Ruth says,



I can write 1 subtraction and 1 addition using the digit cards.

Who is correct? Explain your answer.



RPS  
HW/Ext

## Homework/Extension

### Related Facts

#### Developing

1. A.  $\underline{5} + 9 = 14$ ; B.  $9 + 5 = \underline{14}$ ; C.  $14 - \underline{9} = 5$ ; D.  $\underline{14} - 5 = 9$
2. A and 2; B and 1
3. Alina is correct, there are 4 calculations:  $5 + 8 = 13$ ,  $8 + 5 = 13$ ,  $13 - 5 = 8$ ,  $13 - 8 = 5$ .

#### Expected

4. A.  $\underline{9} + \underline{7} = 16$ ; B.  $7 + \underline{9} = \underline{16}$ ; C.  $\underline{16} - 9 = \underline{7}$ ; D.  $16 - \underline{7} = \underline{9}$

<u>16</u>	
<u>9</u>	<u>7</u>

5. A and 2; B and 1; C and 3
6. Ben is correct, there are 4 calculations:  $6 + 7 = 13$ ,  $7 + 6 = 13$ ,  $13 - 7 = 6$ ,  $13 - 6 = 7$ .

#### Greater Depth

7. A.  $4 + \underline{8} = \underline{12}$ ; B.  $\underline{8} + \underline{4} = 12$ ; C.  $\underline{12} - 8 = \underline{4}$ ; D.  $12 - \underline{4} = \underline{8}$

<u>12</u>	
<u>8</u>	<u>4</u>

8. A.  $\underline{7} + 6 = 13$  and 1.  $\underline{13} - 7 = 6$ ; B.  $11 + 7 = \underline{18}$  and 3.  $18 - \underline{11} = 7$ ; C.  $4 + \underline{12} = 6$  and 2.  $\underline{16} - 4 = 12$
9. Rex is correct, the 2 subtractions are  $17 - 9 = 8$  and  $17 - 8 = 9$  and the 2 additions are  $9 + 8 = 17$  and  $8 + 9 = 17$ .