

Varied Fluency

Step 9: Pattern Spotting

National Curriculum Objectives:

Mathematics Year 3: (3C1) [Add and subtract numbers mentally, including three-digit number and ones; three-digit number and tens; three-digit number and hundreds](#)
Mathematics Year 3: (3C4) [Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction](#)

Differentiation:

Developing Questions to support using patterns to add and subtract up to three-digit numbers with no bridging. Using Base 10 and numerals.

Expected Questions to support using patterns to add and subtract up to three-digit numbers where bridging takes place. Using place value counters and numerals. Numerals represented as words within some questions.

Greater Depth Questions to support using patterns to add and subtract up to three-digit numbers where bridging takes place. Using mixed representations of numerals and words within the same question. No pictorial support.

More [Year 3 Addition and Subtraction](#) resources.

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

Pattern Spotting

1a. Circle the calculations that use the fact $1 + 5 = 6$.

A. $258 + 10 =$

B. $461 + 5 =$

C. $141 + 200 =$



VF

Pattern Spotting

1b. Circle the calculations that use the fact $6 - 2 = 4$.

A. $463 - 20 =$

B. $156 - 3 =$

C. $672 - 400 =$



VF

2a. True or false? If I subtract 2, the ones column is affected.

H	T	O



VF

2b. True or false? If I subtract 70, the tens column is affected.

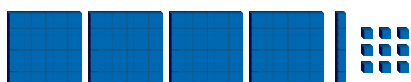
H	T	O



VF

3a. Work out the calculation and circle the correct answer.

$419 - 8 =$



420

410

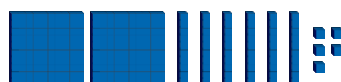
427

411

VF

3b. Work out the calculation and circle the correct answer.

$265 + 100 =$



365

275

264

165

VF

4a. Insert the correct numbers to complete each calculation.

H	T	O

$-$ $= 443$

$-$ $= 426$

$-$ $= 346$



VF

4b. Insert the correct numbers to complete each calculation.

H	T	O

$+$ $= 558$

$+$ $= 398$

$+$ $= 359$

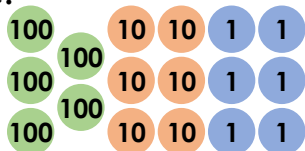


VF

Pattern Spotting

5a. Circle the calculations that use the fact three + two = five.

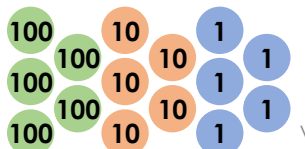
A. $366 + 200 =$



B. $361 + 2 =$



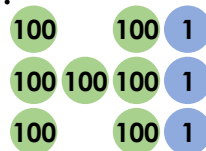
C. $525 + 30 =$



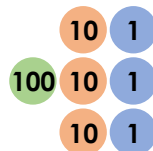
VF

5b. Circle the calculations that use the fact seven - four = three.

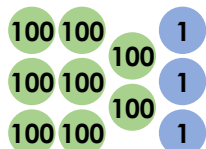
A. $743 - 40 =$



B. $173 - 40 =$



C. $807 - 4 =$



VF

6a. True or false? If I subtract thirty, only the tens column is affected.

H	T	O



VF

6b. True or false? If I subtract sixty, only the hundreds column is affected.

H	T	O



VF

7a. Work out the calculation and circle the correct answer.

$332 - 300 =$



032

32

302

30



VF

7b. Work out the calculation and circle the correct answer.

$146 + 50 =$



176

151

196

96



VF

8a. Insert the correct numbers to complete each calculation.

H	T	O

$- \square = 451$

$- \square = 750$

$- \square = 701$



VF

8b. Insert the correct numbers to complete each calculation.

H	T	O

$+ \square = 639$

$+ \square = 725$

$+ \square = 935$



VF

Pattern Spotting

9a. Circle the calculations that use the fact six + two = eight.

A. $942 + 6 =$ nine hundred and forty-eight

B. $619 + 200 =$ eight hundred and nineteen

C. $363 + 2 =$ three hundred and sixty-five



VF

Pattern Spotting

9b. Circle the calculations that use the fact nine – five = four.

A. $392 - 50 =$ three hundred and forty-two

B. $498 - 5 =$ four hundred and ninety-three

C. $925 - 500 =$ four hundred and twenty-five



VF

10a. True or false? If I subtract 9, only the ones column is affected.

H	T	O
eight	five	three



VF

10b. True or false? If I subtract 40, the tens and hundreds columns are affected.

H	T	O
five	two	eight



VF

11a. Work out the calculation and circle the correct answer.

$679 + 50 =$

seven hundred and twenty-nine

six hundred and eighty-four

six hundred and twenty-nine



VF

11b. Work out the calculation and circle the correct answer.

$841 - 800 =$

two hundred and forty-one

one hundred and Forty-one

forty-one



VF

12a. Insert the correct numbers to complete each calculation.

H	T	O	-	<input type="text"/>	=	692
seven	five	two	-	<input type="text"/>	=	748
			-	<input type="text"/>	=	252



VF

12b. Insert the correct numbers to complete each calculation.

H	T	O	+	<input type="text"/>	=	963
one	six	three	+	<input type="text"/>	=	183
			+	<input type="text"/>	=	172



VF

Varied Fluency Pattern Spotting

Developing

- 1a. **A and B**
- 2a. **True. $39\textcolor{red}{4} - 2 = 39\textcolor{red}{2}$.**
- 3a. **411**
- 4a. **3; 20; 100**

Expected

- 5a. **A and C**
- 6a. **True. $43\textcolor{red}{6} - 30 = 40\textcolor{red}{6}$.**
- 7a. **32 or 032**
- 8a. **300; 1; 50**

Greater Depth

- 9a. **A and B**
- 10a. **False because the tens column would also be affected. $85\textcolor{red}{3} - 9 = 84\textcolor{red}{4}$.**
- 11a. **seven hundred and twenty-nine**
- 12a. **60; 4; 500**

Varied Fluency Pattern Spotting

Developing

- 1b. **A and C**
- 2b. **True. $17\textcolor{red}{2} - 70 = 10\textcolor{red}{2}$.**
- 3b. **365**
- 4b. **200; 40; 1**

Expected

- 5b. **B and C**
- 6b. **False because the tens column is also affected. $65\textcolor{red}{1} - 60 = 59\textcolor{red}{1}$.**
- 7b. **196**
- 8b. **4; 90; 300**

Greater Depth

- 9b. **A and C**
- 10b. **True. $52\textcolor{red}{8} - 40 = 48\textcolor{red}{8}$**
- 11b. **forty-one**
- 12b. **800; 20; 9**