

Reasoning and Problem Solving

Step 18: Check Answers

National Curriculum Objectives:

Mathematics Year 3: (3C3) [Estimate the answer to a calculation and use inverse operations to check answers](#)

Differentiation:

Questions 1, 4 and 7 (Reasoning)

Developing Identify and explain the odd one out of 4 versions of a calculation. Includes 2-digit numbers with no exchanging.

Expected Identify and explain the odd one out of 4 versions of a calculation. Includes two 2-digit or two 3-digit numbers including some exchanging.

Greater Depth Identify and explain the odd one out of 4 versions of a calculation. Includes 2-digit and 3-digit numbers within the same calculation with up to two exchanges.

Questions 2, 5 and 8 (Reasoning)

Developing Explain and correct the mistake made when checking an answer to a calculation. Includes 2-digit numbers with no exchanging.

Expected Explain and correct the mistake made when checking an answer to a calculation. Includes two 2-digit or two 3-digit numbers including some exchanging.

Greater Depth Explain and correct the mistake made when checking an answer to a calculation. Includes 2-digit and 3-digit numbers within the same calculation with up to two exchanges.

Questions 3, 6 and 9 (Problem Solving)

Developing Use digit cards to complete the calculation. Use the inverse operation to check the calculation is correct. Includes 2-digit numbers with no exchanging.

Expected Use digit cards to complete the calculation. Use the inverse operation to check the calculation is correct. Includes two 2-digit or two 3-digit numbers including some exchanging.

Greater Depth Use digit cards to complete the calculation. Use the inverse operation to check the calculation is correct. Includes 2-digit and 3-digit numbers within the same calculation with up to two exchanges.

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

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

Check Answers

1a. Circle the odd one out.

A. $63 + 34 = 97$

C. $97 - 34 = 63$

B. $63 - 97 = 34$

D. $34 + 63 = 97$

Explain your reasoning.



R

Check Answers

1b. Circle the odd one out.

A. $76 - 34 = 42$

C. $34 + 42 = 76$

B. $76 - 42 = 34$

D. $42 + 76 = 34$

Explain your reasoning.



R

2a. Mia is checking her answer to the calculation: $45 + 34 = 79$

She tries the following calculation:

$$45 - 79$$

Explain the mistake that Mia has made.

Which calculations could she use?



R

2b. Ben is checking his answer to the calculation: $88 - 65 = 23$

He tries the following calculation:

$$65 + 88$$

Explain the mistake that Ben has made.

Which calculations could he use?



R

3a. The target number is shown below.

73

Use the digit cards given to complete the calculation and reach the target number.

$$\boxed{2} \boxed{} + \boxed{} \boxed{0} =$$

$$\boxed{5} \quad \boxed{3}$$

Write the inverse calculation to check your answer.



PS

3b. The target number is shown below.

95

Use the digit cards given to complete the calculation and reach the target number.

$$\boxed{} \boxed{1} + \boxed{7} \boxed{} =$$

$$\boxed{2} \quad \boxed{4}$$

Write the inverse calculation to check your answer.



PS

Check Answers

4a. Circle the odd one out.

A. $602 + 185 = 787$

C. $787 - 185 = 602$

B. $185 - 787 = 602$

D. $185 + 602 = 787$

Explain your reasoning.



R

Check Answers

4b. Circle the odd one out.

A. $65 + 26 = 91$

C. $26 + 91 = 65$

B. $91 - 26 = 65$

D. $91 - 65 = 26$

Explain your reasoning.



R

5a. Eva is checking her answer to the calculation: $642 + 153 = 795$

She tries the following calculation:

$$642 - 795$$

Explain the mistake that Eva has made.

Which calculations could she use?



R

5b. Ali is checking his answer to the calculation: $582 - 271 = 311$

He tries the following calculation:

$$271 + 582$$

Explain the mistake that Ali has made.

Which calculations could he use?



R

6a. The target number is shown below.

687

Use the digit cards given to complete the calculation and reach the target number.

$$5 \square \square + \square 0 5 =$$

1 8 2

Write the inverse calculation to check your answer.



PS

6b. The target number is shown below.

845

Use the digit cards given to complete the calculation and reach the target number.

$$3 \square 7 + \square 7 \square =$$

4 6 8

Write the inverse calculation to check your answer.



PS

Check Answers

7a. Circle the odd one out.

A. $452 + 79 = 531$

C. $531 - 452 = 79$

B. $452 - 79 = 531$

D. $79 + 452 = 531$

Explain your reasoning.



R

Check Answers

7b. Circle the odd one out.

A. $657 + 278 = 935$

C. $935 - 657 = 278$

B. $278 + 657 = 935$

D. $657 - 935 = 278$

Explain your reasoning.



R

8a. Jen is checking her answer to the calculation: $567 + 285 = 852$

She tries the following calculation:

$$852 + 285$$

Explain the mistake that Jen has made.

Which calculations could she use?



R

8b. Saj is checking his answer to the calculation: $784 - 95 = 689$

He tries the following calculation:

$$784 + 689$$

Explain the mistake that Saj has made.

Which calculations could he use?



R

9a. The target number is shown below.

1,134

Use the digit cards given to complete the calculation and reach the target number.

$$7 \square 6 + \square 4 \square =$$

3 8 4

Write the inverse calculation to check your answer.



PS

9b. The target number is shown below.

942

Use the digit cards given to complete the calculation and reach the target number.

$$\square 9 3 + 2 \square \square =$$

9 4 6

Write the inverse calculation to check your answer.



PS

Reasoning and Problem Solving

Check Answers

Developing

1a. B is the odd one out because the numbers are in the incorrect order in the number sentence.

2a. Mia has put the numbers in the incorrect order in the number sentence.

The calculations she could use are:

$$79 - 45 = 34$$

$$79 - 34 = 45$$

3a. $23 + 50 = 73$

The inverse calculations would be:

$$73 - 23 = 50$$

$$73 - 50 = 23$$

Expected

4a. B is the odd one out because the numbers are in the incorrect order in the number sentence.

5a. Eva has put the numbers in the incorrect order in the number sentence.

The calculations she could use are:

$$795 - 153 = 642$$

$$795 - 642 = 153$$

6a. $582 + 105 = 687$

The inverse calculations would be:

$$687 - 105 = 582$$

$$687 - 582 = 105$$

Greater Depth

7a. B is the odd one out because $452 - 79 = 373$. Therefore, this calculation cannot be used to check the others.

8a. Jen has added where she should use the inverse to check her answer. She needs to subtract either 567 or 285 from the answer (852).

The calculations she could use are:

$$852 - 567 = 285$$

$$852 - 285 = 567$$

9a. $786 + 348 = 1,134$

The inverse calculations would be:

$$1,134 - 348 = 786$$

$$1,134 - 786 = 348$$

Reasoning and Problem Solving

Check Answers

Developing

1b. D is the odd one out because the calculation uses different numbers. Therefore, this calculation cannot be used to check the others.

2b. Ben has added the numbers from the original number sentence. He should add the answer (23) to 65.

The calculations he could use are:

$$65 + 23 = 88$$

$$23 + 65 = 88$$

3b. $21 + 74 = 95$

The inverse calculations would be:

$$95 - 21 = 74$$

$$95 - 74 = 21$$

Expected

4b. C is the odd one out because $26 + 91 = 117$. Therefore, this calculation cannot be used to check the others.

5b. Ali has added the numbers from the original number sentence. He should add the answer (311) to 271.

The calculations he could use are:

$$271 + 311 = 582$$

$$311 + 271 = 582$$

6b. $367 + 478 = 845$

The inverse calculations would be:

$$845 - 478 = 367$$

$$845 - 367 = 478$$

Greater Depth

7b. D is the odd one out because the numbers are in the incorrect order in the number sentence.

8b. Saj has added the answer to the larger number from the number sentence. He needs to add the smaller number (95) to the answer.

The calculations he could use are:

$$689 + 95 = 784$$

$$95 + 689 = 784$$

9b. $693 + 249 = 942$

The inverse calculations would be:

$$942 - 249 = 693$$

$$942 - 693 = 249$$