

Integer Error Detectives

Grade 7 | 36 tasks

Ask learners to evaluate a solution, not just produce a number. They identify the first incorrect transition, repair the chain and explain the rule. Some chains are already correct.

Integer addition, subtraction and opposites

36 chains, including 8 with no error

Writing space, worked examples and answer keys

Use one chain as a warm-up or select a small set for partner error analysis. Model how to stop at the first incorrect equality. Accept equivalent correct chains and explanations.

The following pages are actual excerpts from the resource.
A4 + US Letter | Version 1.3
Printable PDF with teacher support

Integer Error Detectives

Year-round edition | Student practice | A4

P06-01 | Starter

Find the first wrong step, or write "No error".

Start: $-2 + (-7)$

1. $-(2 + 7)$

2. -9

First wrong step / No error: _____ Result: _____

Correct the chain and explain the rule:

P06-02 | Starter

Find the first wrong step, or write "No error".

Start: $10 - (-(-2))$

1. $10 + 2$

2. 12

First wrong step / No error: _____ Result: _____

Correct the chain and explain the rule:

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Year-round edition | Student practice | A4

P06-19 | Stretch

Find the first wrong step, or write "No error".

Start: $(-32 + (-36)) + (-3)$

1. $(-32 + (-36)) - 3$
2. $(-32 + 36) - 3$
3. $-68 - 3$
4. -71

First wrong step / No error: _____ Result: _____

Correct the chain and explain the rule:

P06-20 | Stretch

Find the first wrong step, or write "No error".

Start: $((-31) - 21) + (-4)$

1. $((-31) - 21) - 4$
2. $(-31 + 21) - 4$
3. $(21 - 31) - 4$
4. $-10 - 4$
5. -14

First wrong step / No error: _____ Result: _____

Correct the chain and explain the rule:

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Year-round edition | Student practice | A4

P06-31 | Stretch

Find the first wrong step, or write "No error".

Start: $(35 + (-39)) + (-2)$

1. $(35 + (-39)) - 2$

2. $(35 + 39) - 2$

3. $74 - 2$

4. 72

First wrong step / No error: _____ Result: _____

Correct the chain and explain the rule:

P06-32 | Stretch

Find the first wrong step, or write "No error".

Start: $((-22) - (-23)) + (-8)$

1. $((-22) - (-23)) - 8$

2. $((-22) - 23) - 8$

3. $-45 - 8$

4. -53

First wrong step / No error: _____ Result: _____

Correct the chain and explain the rule:

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Year-round edition | Teacher answer key | A4

P06-31**Stretch**

First wrong step: 2; result: -6

Start: $(35 + (-39)) + (-2)$

1. $(35 + (-39)) - 2$
2. $(35 - 39) - 2$
3. $-4 - 2$
4. -6

Adding -39 means subtracting 39, not adding 39.

P06-32**Stretch**

First wrong step: 2; result: -7

Start: $((-22) - (-23)) + (-8)$

1. $((-22) - (-23)) - 8$
2. $((-22) + 23) - 8$
3. $1 - 8$
4. -7

Subtracting -23 means adding its opposite, $+23$.