



Adding & subtracting linear expressions

GRADE 7 MATH

Name _____

Date _____

Work in order. Rewrite every subtraction as adding the opposite, showing the flipped signs. One skill: **adding and subtracting linear expressions**.

WORKED EXAMPLE

Adding: collect like terms, nothing changes. Subtracting: **flip every sign inside the bracket**, then collect. Like terms only — x terms with x terms, constants with constants.

1. Simplify $(4x + 3) + (2x + 5)$.

FLUENCY

Show your thinking

Answer

2. Simplify $(4x + 3) - (2x + 5)$.

FLUENCY

Show your thinking

Answer

3. Simplify $(6x - 2) + (x - 7)$.

FLUENCY

Show your thinking

Answer

4. Simplify $(6x - 2) - (x - 7)$.

APPLICATION

Show your thinking

Answer

5. In question 4 the constant went from -2 to $+5$. Explain where the $+7$ came from.

REASONING

Show your thinking

Answer

6. Simplify $(\frac{2}{3}x + 1) + (\frac{1}{3}x - 4)$.

APPLICATION

Show your thinking

Answer

7. Simplify $(5x + 1) - (5x + 1)$.

APPLICATION

Show your thinking

Answer

8. Check your answer to question 4 by substituting $x = 2$ into the original expression.

APPLICATION

Show your thinking

Answer

9. Substitute $x = 2$ into your simplified answer from question 4. Do they match? What would it mean if they did not?

REASONING

Show your thinking

Answer