



GRADE 7 · EXPRESSIONS & EQUATIONS · HOMEWORK

ADDING & SUBTRACTING LINEAR EXPRESSIONS

Today's goal: I can add linear expressions with rational coefficients and subtract linear expressions with rational coefficients.



Pick your peppers!

Everyone does Mild & Medium. Then climb as high as you can.



Mild

Tan the Turtle



Medium

Digit the Fox



Spicy

Blaze the Dragon

WATCH MR DJ SOLVE

Simplify $(8x + 5) - (3x - 2)$.

1 Flip inside: $(8x + 5) + (-3x + 2)$.

2 $8x - 3x = 5x$

3 $5 + 2 = 7$.

Answer: $5x + 7$



REMEMBER Adding: collect like terms. Subtracting: flip every sign inside the bracket first, then collect. Substituting a value into both the original and your answer is a fast check.



FAMILY CORNER

No need to remember this math yourself! Ask your student to teach you Mr DJ's example, then try the first Mild problem together.



MILD

Tan the Turtle: Slow and steady. Warm up!

1 Simplify $(8x + 5) + (3x - 2)$.

Answer

2 Simplify $(9x - 4) + (2x - 6)$.

Answer



OOPS ALERT

Careful on #1! The slip Mr DJ sees most: Answered 14x.



MEDIUM

Digit the Fox: Stretch your brain.

3 Simplify $(9x - 4) - (2x - 6)$.

Answer

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

Answer

5 Simplify $(3x + 7) - (3x - 7)$.

Answer



SPICY

Blaze the Dragon: Bring the heat!

- 6 Your answer to question 5 has no x in it. Explain why that is correct rather than a mistake.

Answer

- 7 Check question 3 by substituting $x = 3$ into both the original and your simplified answer.

Answer



How did this sheet feel? ☐ Easy for me ☐ Just right ☐ Made me think

Stuck? Watch Mr DJ explain it

"Combining Like Terms - Watch me solve this in under 2 minutes - then you try one!" on YouTube: [youtube.com/@MathWithMrDJ](https://www.youtube.com/@MathWithMrDJ)

Brain break: daily puzzles

Three new math puzzles every day, free: puzzles.mathwithmrdj.com