



GRADE 7 · EXPRESSIONS & EQUATIONS · HOMEWORK

MULTI-STEP PROBLEMS WITH RATIONAL NUMBERS

Today's goal: I can solve multi-step real-life problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), solve multi-step mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), apply properties of operations to calculate with numbers in any form (whole numbers, fractions, and decimals), converting between number forms when appropriate and assess the reasonableness of answers using mental computation and estimation strategies.



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

How many pages remain?

1 $72 - 45 = 27$.

Answer: **27**



REMEMBER

Estimate first with friendly numbers, noting whether you rounded up or down — that tells you which side the true answer falls. Then calculate and compare.



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 Five tickets cost \$9.50 each. Find the total.

Answer



OOPS ALERT

Careful on #1! The slip Mr DJ sees most: Answered \$45 by dropping the cents.



MEDIUM

Digit the Fox: Stretch your brain.

- 2 Take 20% off that total.

Answer

- 3 A book has 72 pages and $\frac{5}{8}$ have been read. How many pages is that?

Answer

- 4 Find $-6.75 + 2\frac{1}{2}$. Give your answer as a fraction.

Answer

- 5 Calculate 1.2×0.5 .

Answer



SPICY

Blaze the Dragon: Bring the heat!

- 6 Your answer to question 5 is smaller than 1.2. Explain why multiplying made the number smaller.

Answer

- 7 Estimate the cost of 4 items at \$19.75 each, then calculate exactly. Say whether your estimate was above or below, and why.

Answer



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

Stuck? Watch Mr DJ explain it

"How to Estimate With Percents" on YouTube: [youtube.com/@MathWithMrDJ](https://www.youtube.com/@MathWithMrDJ)

Brain break: daily puzzles

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