



GRADE 7 • THE NUMBER SYSTEM • PRACTICE

FOUR OPERATIONS WITH RATIONAL NUMBERS

Today's goal: I can add rational numbers to solve mathematical problems, add rational numbers to solve real-world problems, subtract rational numbers to solve mathematical problems, subtract rational numbers to solve real-world problems, multiply rational numbers to solve mathematical problems, multiply rational numbers to solve real-world problems, divide rational numbers to solve mathematical problems and divide rational numbers to solve real-world problems.

**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

**Extra Spicy**

Pi the Owl

**REMEMBER**

Decide the operation from the situation. A single change → **add** the signed amount. A repeated change → **multiply**. A comparison or gap → **subtract**. Sharing → **divide**. Then turn the signed answer back into words.

**MILD****Tan the Turtle:** Slow and steady. Warm up!

- 1 An account holds \$120. A payment of \$95 goes out. What is the balance?

Answer

**OOPS ALERT**

Careful on #1! Blaze spotted the slip Mr DJ sees most: Answered -25 by subtracting the wrong way round.

**MEDIUM****Digit the Fox:** Stretch your brain.

- 2 Three separate charges of \$18 are made. What is the total change to the balance?

Answer

- 3 The temperature is -7°C and rises 15 degrees. What is the new temperature?

Answer

- 4 The temperature is 6°C and falls 2 degrees each hour for 5 hours. What is the new temperature?

Answer

- 5 How much warmer is 8°C than -7°C ?

Answer

- 6 A debt of \$96 is shared equally between 4 people. What is each share?

Answer



SPICY

Blaze the Dragon: Bring the heat!

- 7 Starting from \$120, apply the \$95 payment and the three \$18 charges. What is the final balance? Say what it means.

Answer

- 8 A diver is at -200 m and rises 350 m. Where is the diver now? Say what your answer means.

Answer



EXTRA SPICY

Pi the Owl: Big-brain challenge.

- 9 Half the \$96 debt is forgiven, then the rest is shared between the same 4 people. What is each share now, and how does it compare with question 6?

Answer



How did this sheet feel?

☐ Easy for me ☐ Just right ☐ Made me think

Stuck? Watch Mr DJ explain it

Step-by-step video lessons on YouTube: [youtube.com/@MathWithMrDJ](https://www.youtube.com/@MathWithMrDJ)

Brain break: daily puzzles

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