



GRADE 7 · RATIOS & PROPORTIONAL RELATIONSHIPS · HOMEWORK

MULTI-STEP RATIO PROBLEMS

Today's goal: I can solve multi-step ratio problems, including by using proportional relationships.



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

What do 8 tickets cost?

1 $8 \times \$7 = \$56.$

Answer: **\$56**



REMEMBER Ratios scale by multiplying. Find the value of one unit, then multiply — or find the scale factor and apply it to both. For a ratio sharing a total, add the parts to find what one part is worth.



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 3 tickets cost \$21. What does 1 ticket cost?

Answer



OOPS ALERT

Careful on #1! The slip Mr DJ sees most: Subtracted to get \$18.



MEDIUM

Digit the Fox: Stretch your brain.

- 2 A car uses 6 litres to travel 15 km. How far on 10 litres?

Answer

- 3 9 kg of apples cost \$54. What do 4 kg cost?

Answer

- 4 Two friends share \$40 in the ratio 5 : 3. What is the larger share?

Answer

- 5 What is the smaller share?

Answer

- 6 How much more does the first friend get than the second?

Answer



🔥🔥🔥 **SPICY**

Blaze the Dragon: Bring the heat!

- 7 Show that your two shares are in the ratio 5 : 3, and explain why checking the total alone would not be enough.

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