



GRADE 6 · THE NUMBER SYSTEM · PRACTICE

FACTORING WITH THE DISTRIBUTIVE PROPERTY

Today's goal: I can use the distributive property to express a sum of two whole numbers 1-100 with a common factor as a multiple of a sum of two whole numbers with no common factor.



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

WATCH MR DJ SOLVE

Rewrite $42 + 14$ using the GCF.

- 1 GCF = 14
- 2 $42 \div 14 = 3$, $14 \div 14 = 1$.
- 3 Check: $14 \times 4 = 56$.

Answer: $14(3 + 1)$



REMEMBER Rewrite $42 + 14$. GCF(42, 14) = **14**. Both $\div 14$: 3 and 1. So $42 + 14 = 14(3 + 1)$. Check: $14 \times 4 = 56$. ✓ **Always check** that the two numbers left inside share no factor.


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

- 1 Rewrite $15 + 25$ using the GCF.

Answer

- 2 Rewrite $12 + 20$ using the GCF.

Answer



OOPS ALERT

Careful on #1! The slip Mr DJ sees most: Divided one addend $\rightarrow 5(3 + 25)$.

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

- 3 Rewrite $18 + 27$ using the GCF.

Answer

- 4 Rewrite $40 + 16$ using the GCF.

Answer

- 5 Rewrite $45 + 30$ using the GCF.

Answer

**SPICY****Blaze the Dragon:** Bring the heat!

- 6 Rewrite $60 + 48$ using the GCF, then check your answer by multiplying back.

Answer

- 7 Theo writes $28 + 35 = 7(4 + 5)$. Is he fully factored? Explain how you know.

Answer



EXTRA SPICY

Pi the Owl: Big-brain challenge.

8

Rewrite $50 + 75$ using the GCF. Then explain how you know you cannot factor any further.

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