



Factoring with the distributive property

GRADE 6 MATH

Name _____

Date _____

Do this on your own — the worked example shows what to do. Show the GCF you used; final answers in the boxes. One skill: **factoring out the greatest common factor**.

WORKED EXAMPLE

Rewrite $16 + 24$. $\text{GCF}(16, 24) = 8$. Both $\div 8$: 2 and 3. So $16 + 24 = 8(2 + 3)$. Check: $8 \times 5 = 40$. ✓ Finished only when the two numbers inside share no factor.

1. Rewrite **16 + 24** using the GCF.

FLUENCY

Show your thinking

Answer

2. Rewrite **9 + 21** using the GCF.

FLUENCY

Show your thinking

Answer

3. Rewrite $33 + 44$ using the GCF.

FLUENCY

Show your thinking

Answer

4. Rewrite $28 + 35$ using the GCF.

APPLICATION

Show your thinking

Answer

5. Rewrite $21 + 49$ using the GCF.

APPLICATION

Show your thinking

Answer

6. Rewrite $45 + 30$ using the GCF.

APPLICATION

Show your thinking

Answer

7. Rewrite $60 + 48$ using the GCF, then check by multiplying back.

REASONING

Show your thinking

Answer

8. Priya writes $20 + 30 = 5(4 + 6)$. Is her equation true? Is it fully factored? Explain.

REASONING

Show your thinking

Answer