LC: To consolidate using four operations with fractions

- ❑ I can simplify fractions
- ❑ I can multiply fractions
- ❑ I can convert fractions with an LCM
- ❑ I can divide fractions
- ❑ I can consolidate fraction knowledge
- ❑ I can journal fractions rules

Rediscover – four operations with fractions

1) Talk to your learning partner about the method needed.

2) Copy and complete the question.

3) Journal notes about the method.

Work out

$$\frac{3}{4} + \frac{2}{7}$$

Work out

$$\frac{3}{4}+\frac{2}{7}$$

$$\frac{3}{4}+\frac{2}{7}$$

$$=\frac{21}{28}+\frac{8}{28}$$

$$=\frac{29}{28}$$

$$=1\frac{1}{28}$$

Rediscover – four operations with fractions

1) Talk to your learning partner about the method needed.

2) Copy and complete the question.

3) Journal notes about the method.

Work out

$$\frac{3}{4} - \frac{2}{7}$$

Work out

$$\frac{3}{4} - \frac{2}{7}$$

$$= \frac{3}{4} - \frac{2}{7}$$

$$= \frac{21}{28} - \frac{8}{28}$$

$$= \frac{13}{28}$$

Rediscover – four operations with fractions

1) Talk to your learning partner about the method needed.

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Work out

$$\frac{3}{4} \div \frac{2}{7}$$

Work out

$$\frac{3}{4} \div \frac{2}{7}$$

$$\frac{3}{4} \times \frac{7}{2} = \frac{21}{8} = 2\frac{5}{8}$$

Rediscover – four operations with fractions

1) Talk to your learning partner about the method needed.

2) Copy and complete the question.

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Work out

$$\frac{3}{4} \times \frac{2}{7}$$

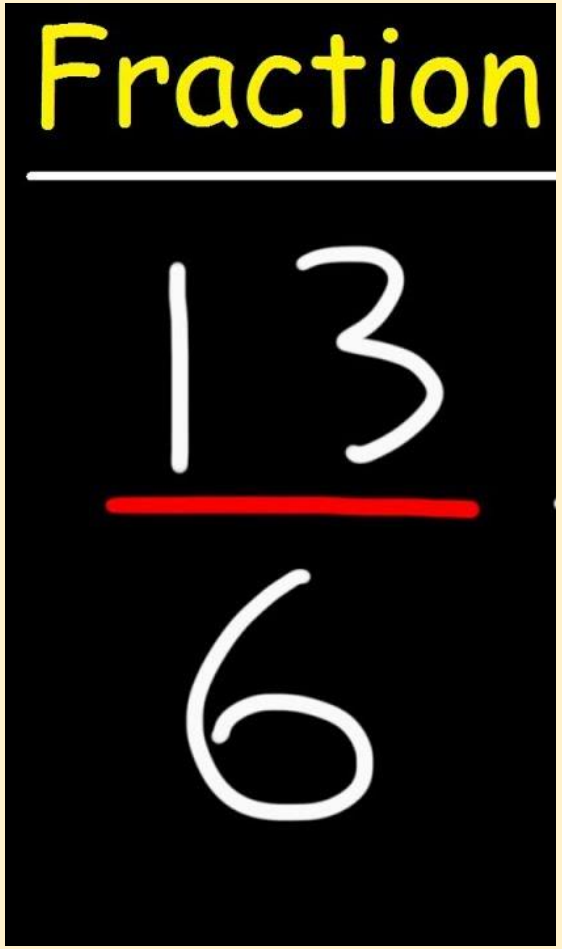
Work out

$$\frac{3}{4} \times \frac{2}{7}$$

$$\frac{3 \times 2}{4 \times 7} = \frac{6}{28} = \frac{3}{14}$$

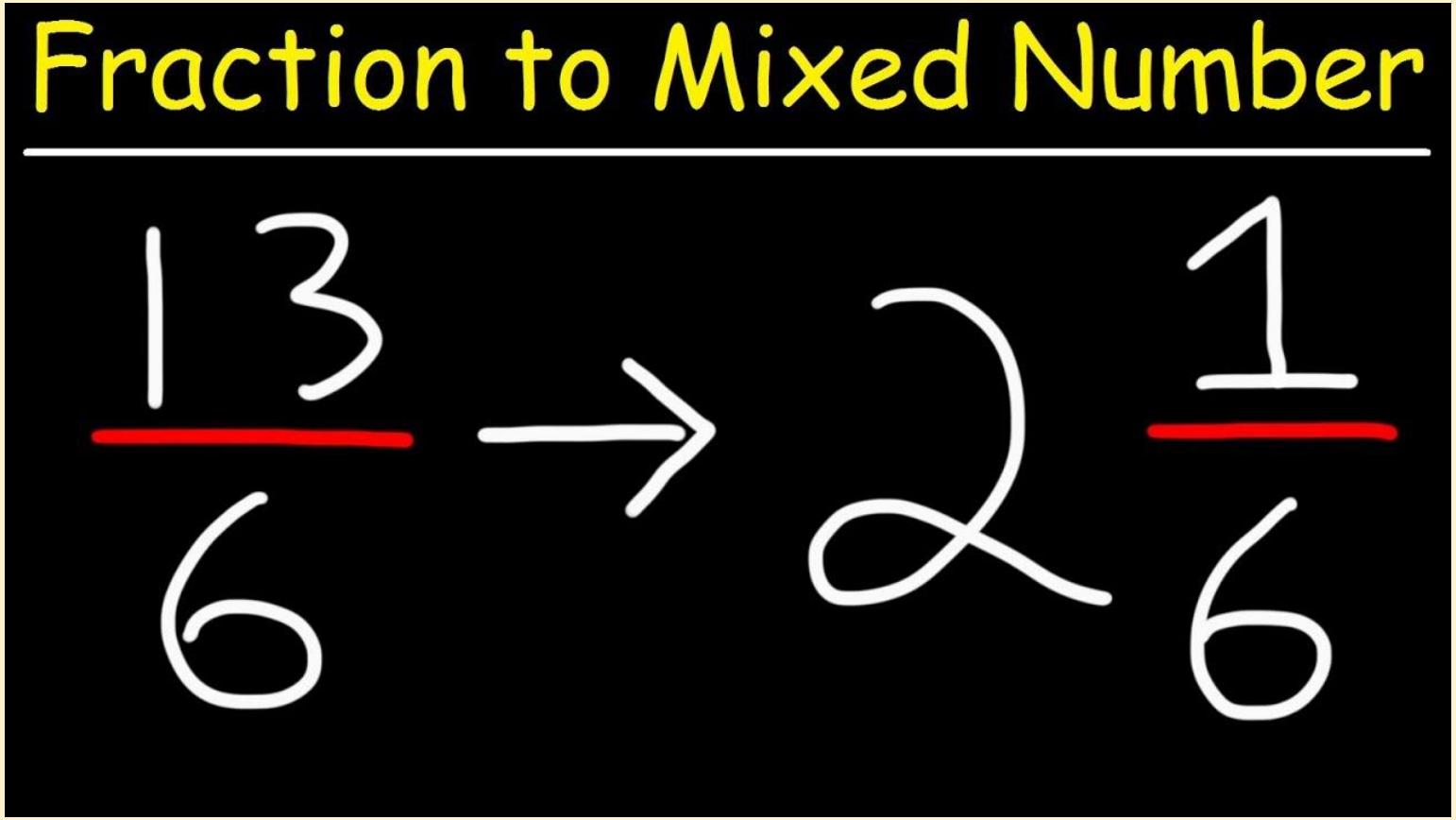
Improper fractions

How can we change this to a mixed number?



How many groups of 6 in 13?

What is left over?



MULTIPLYING FRACTIONS BY WHOLE NUMBERS

STEP-BY-STEP

$$\frac{2}{7} \times 3$$

STEP ONE

$$\frac{2}{7} \times \frac{3}{1}$$

STEP TWO

$$= \frac{2 \times 3}{7 \times 1}$$

STEP THREE

$$= \frac{6}{7}$$

by Whole Numbers

$$\frac{3}{7} \div 2$$

$$\frac{3}{7} \div \frac{2}{1} \rightarrow \frac{3}{7} \times \frac{1}{2}$$

Keep Change Flip

$$\frac{3}{7} \times \frac{1}{2} = \frac{3 \times 1}{7 \times 2} = \frac{3}{14}$$

mashupmath

How to Divide Fractions

by Fractions

$$\frac{2}{3} \div \frac{4}{5}$$

$$\frac{2}{3} \div \frac{4}{5} \rightarrow \frac{2}{3} \times \frac{5}{4}$$

Keep ↑ Change ↑ Flip ↑

$$\frac{2}{3} \times \frac{5}{4} = \frac{2 \times 5}{3 \times 4} = \frac{10}{12} = \frac{5}{6}$$

by Whole Numbers

$$\frac{3}{7} \div 2$$

$$\frac{3}{7} \div \frac{2}{1} \rightarrow \frac{3}{7} \times \frac{1}{2}$$

Keep ↑ Change ↑ Flip ↑

$$\frac{3}{7} \times \frac{1}{2} = \frac{3 \times 1}{7 \times 2} = \frac{3}{14}$$

by Mixed Numbers

$$6\frac{1}{2} \div 2\frac{1}{4}$$

$$\frac{13}{2} \div \frac{9}{4} \rightarrow \frac{13}{2} \times \frac{4}{9}$$

Keep ↑ Change ↑ Flip ↑

$$\frac{13}{2} \times \frac{4}{9} = \frac{13 \times 4}{2 \times 9} = \frac{52}{18} = \frac{22}{9} \text{ or } 2\frac{8}{9}$$

How to Divide Mixed Numbers using Keep-Change-Flip!

Activity 1: Complete the worksheet

Activity 2: Create a poster with the fraction rules we have revised today. This can be finished at home.

Learning reflection:

The fraction rule I need to practise the most is…

Adding Fractions

1. $\frac{2}{5}+\frac{1}{5}=$
2. $\frac{3}{8}+\frac{1}{4}=$
3. $\frac{5}{6}+\frac{1}{3}=$

Subtracting Fractions

4. $\frac{7}{10}-\frac{2}{10}=$
5. $\frac{3}{4}-\frac{1}{2}=$
6. $\frac{5}{6}-\frac{1}{3}=$

Multiplying Fractions

7. $\frac{2}{3}\times\frac{3}{4}=$
8. $\frac{5}{6}\times\frac{1}{2}=$
9. $\frac{3}{5}\times\frac{2}{3}=$

⭐ Challenge Question (Mixed Numbers)

10. $1\frac{1}{2}+\frac{3}{4}=$

✅ Answer Key

1. $\frac{2}{5}+\frac{1}{5}=\frac{3}{5}$
2. $\frac{3}{8}+\frac{1}{4}=\frac{3}{8}+\frac{2}{8}=\frac{5}{8}$
3. $\frac{5}{6}+\frac{1}{3}=\frac{5}{6}+\frac{2}{6}=\frac{7}{6}=1\frac{1}{6}$
4. $\frac{7}{10}-\frac{2}{10}=\frac{5}{10}=\frac{1}{2}$
5. $\frac{3}{4}-\frac{1}{2}=\frac{3}{4}-\frac{2}{4}=\frac{1}{4}$
6. $\frac{5}{6}-\frac{1}{3}=\frac{5}{6}-\frac{2}{6}=\frac{3}{6}=\frac{1}{2}$
7. $\frac{2}{3}\times\frac{3}{4}=\frac{6}{12}=\frac{1}{2}$
8. $\frac{5}{6}\times\frac{1}{2}=\frac{5}{12}$
9. $\frac{3}{5}\times\frac{2}{3}=\frac{6}{15}=\frac{2}{5}$
10. $1\frac{1}{2}+\frac{3}{4}=\frac{3}{2}+\frac{3}{4}=\frac{6}{4}+\frac{3}{4}=\frac{9}{4}=2\frac{1}{4}$

Learning Reflection

To divide a fraction by an integer, you need to…

Challenge 1:

Challenge 2:

Challenge 3

answers

Going deeper...
Making S=P+A+C+E

Going deeper...
Making S=P+A+C+E

Going deeper...
Making S=P+A+C+E

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Going deeper...
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Challenge 1

Challenge 2

Challenge 3