

Number date:	WALT: Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions	Teacher Assessment Fluency: Varied fluency: Reasoning/PS: Greater depth: Extension:
Roman numeral date:	GD: Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions to solve multi-step problems Strategy: Find the lowest common multiple	
SA:		Self-Assessment Fluency: Varied fluency: Reasoning/PS: Greater depth: Extension:

### Fluency

$$1\frac{1}{3} + 2\frac{1}{6} = 3 + \frac{3}{6} = 3\frac{3}{6} \text{ or } 3\frac{1}{2}$$

Add the fractions by adding the whole first and then the fractions. Give your answer in its simplest form.

$$1 + 2 = 3$$

$$\frac{1}{3} + \frac{1}{6} = \frac{2}{6} + \frac{1}{6} = \frac{3}{6}$$

$$3\frac{1}{4} + 2\frac{3}{8}$$

$$4\frac{1}{9} + 3\frac{2}{3}$$

$$2\frac{5}{12} + 2\frac{1}{3}$$

### Varied Fluency

$$1\frac{3}{4} + 2\frac{1}{8} = \frac{7}{4} + \frac{17}{8} = \frac{14}{8} + \frac{17}{8} = \frac{31}{8} = 3\frac{7}{8}$$

Add the fractions by converting them to improper fractions.

$$1\frac{1}{4} + 2\frac{5}{12}$$

$$2\frac{1}{9} + 1\frac{1}{3}$$

$$2\frac{1}{6} + 2\frac{2}{3}$$

### Reasoning and Problem Solving

Add these fractions.

$$4\frac{7}{9} + 2\frac{1}{3}$$

$$\frac{17}{6} + 1\frac{1}{3}$$

$$\frac{15}{8} + 2\frac{1}{4}$$

How do they differ from previous examples?

### Greater Depth

Jack and Whitney have some juice.

Jack drinks  $2\frac{1}{4}$  litres and Whitney drinks  $2\frac{5}{12}$  litres.

How much do they drink altogether?

Complete this using two different methods.

Which method do you think is more efficient? Why?

### Extension

Fill in the missing numbers.

$$4\frac{5}{6} + \frac{\square\square}{\square\square} = 10\frac{1}{3}$$