Computational Fluency of Fractions Adding Fractions with Unlike Denominators **Lesson Notes** 

**6.2** 

## **Lesson Objectives**

- Find equivalent fractions.
- Model addition of fractions with unlike denominators using diagrams and/or illustrations of manipulatives.
- Develop and use algorithms to add fractions with unlike denominators.

## **Subtopic 1**

**Model Adding Fractions with Unlike Denominators** 

Model using  $3 \times 4$  egg cartons.

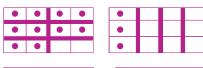


Module 6

Lesson 2

$$\frac{5}{6} + \frac{1}{4}$$

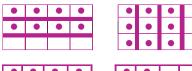
$$1\frac{1}{12}$$

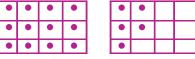




$$\frac{2}{3} + \frac{3}{4}$$

$$1\frac{5}{12}$$





## **Subtopic 2** Adding Fractions with Unlike Denominators

When two or more fractions do not have a **common denominator**, they have **unlike denominators**.

## **Adding Fractions with Unlike Denominators**

- Write equivalent fractions using a **common denominator**.
- Add.
- Write the answer in **simplest** form.



Grayson uses  $\frac{2}{3}$  yard of ribbon for one bow and  $\frac{1}{8}$  yard of ribbon for another bow. How much ribbon does Grayson use for both bows?

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

$$\frac{\frac{16}{24} + \frac{3}{24}}{\frac{16 + 3}{24}}$$

$$\frac{\frac{19}{24}}{\frac{19}{24}}$$

Grayson uses  $\frac{19}{24}$  yard of ribbon for both bows.