

# Varied Fluency

## Step 5: Count in Fractions

### National Curriculum Objectives:

Mathematics Year 4: (4F4) [Add and subtract fractions with the same denominator](#)

### Differentiation:

**Developing** Questions to support counting in fractions when completing sequences in ascending and descending order where the sequence increases by one fraction increment. Using mixed numbers and improper fractions.

**Expected** Questions to support counting in fractions when completing sequences in ascending and descending order. Using mixed numbers and improper fractions.

**Greater Depth** Questions to support counting in fractions when completing sequences in ascending and descending order using some denominators that are double or half of the previous fraction. Using mixed numbers and improper fractions.

More [Year 4 Fractions](#) resources.

Did you like this resource? Don't forget to [review](#) it on our website.

## Count in Fractions

1a. A sequence increases by  $\frac{1}{6}$  each time.

Shade the bar models to show the next two fractions in the sequence.

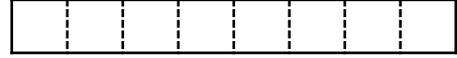
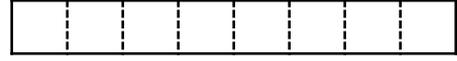


VF

## Count in Fractions

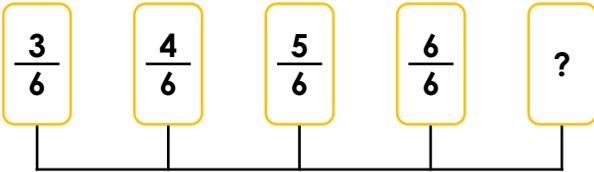
1b. A sequence increases by  $\frac{1}{8}$  each time.

Shade the bar models to show the next two fractions in the sequence.



VF

2a. Which fraction comes next in the sequence below? Circle the correct answer.

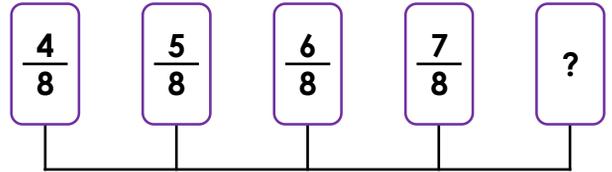


$\frac{8}{6}$     $\frac{7}{6}$     $\frac{5}{6}$



VF

2b. Which fraction comes next in the sequence below? Circle the correct answer.



$\frac{9}{8}$     $\frac{8}{9}$     $\frac{8}{8}$



VF

3a. What fraction is represented by the bar model below?



Write the next two fractions needed if the sequence increases by  $\frac{1}{8}$  each time.



VF

3b. What fraction is represented by the bar model below?

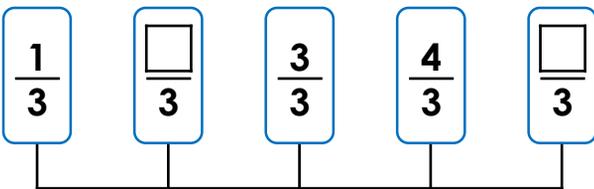


Write the next two fractions needed if the sequence increases by  $\frac{1}{3}$  each time.



VF

4a. Complete the sequence.

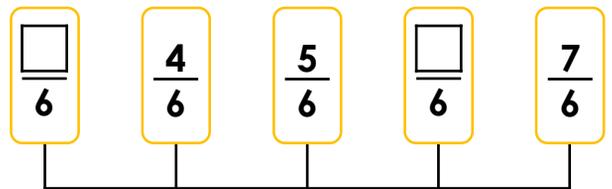


Rewrite the sequence using mixed numbers.



VF

4b. Complete the sequence.



Rewrite the sequence using mixed numbers.



VF

## Count in Fractions

5a. A sequence decreases by  $\frac{3}{12}$  each time.

Shade the bar models to show the next two fractions in the sequence.



VF

## Count in Fractions

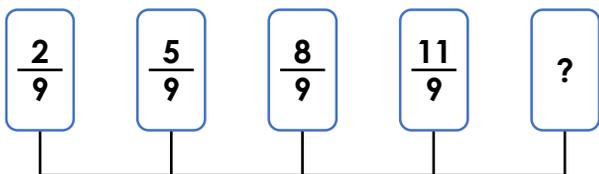
5b. A sequence increases by  $\frac{2}{6}$  each time.

Shade the bar models to show the next two fractions in the sequence.



VF

6a. Which fraction comes next in the sequence below? Circle the correct answer.

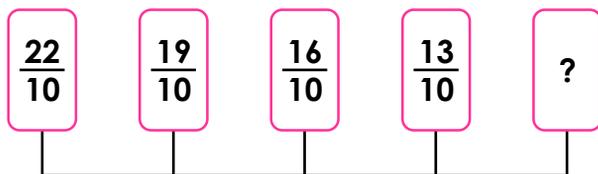


$\frac{14}{9}$     $\frac{12}{9}$     $\frac{15}{9}$



VF

6b. Which fraction comes next in the sequence below? Circle the correct answer.



$\frac{11}{10}$     $\frac{12}{10}$     $\frac{10}{10}$



VF

7a. What fraction is represented by the bar model below?



Write the next two fractions needed if the sequence decreases by  $\frac{2}{6}$  each time.



VF

7b. What fraction is represented by the bar model below?

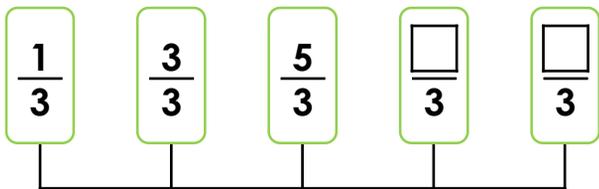


Write the next two fractions needed if the sequence increases by  $\frac{3}{8}$  each time.



VF

8a. Complete the sequence.

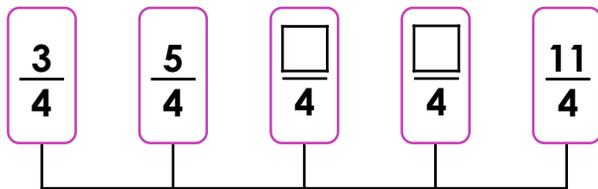


Rewrite the sequence using mixed numbers.



VF

8b. Complete the sequence.



Rewrite the sequence using mixed numbers.

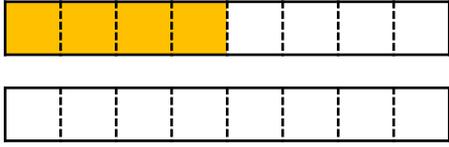


VF

## Count in Fractions

9a. A sequence increases by  $\frac{3}{4}$  each time.

Write the next two fractions in the sequence.



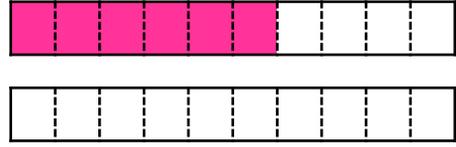
\_\_\_\_\_ and \_\_\_\_\_

VF

## Count in Fractions

9b. A sequence increases by  $\frac{3}{5}$  each time.

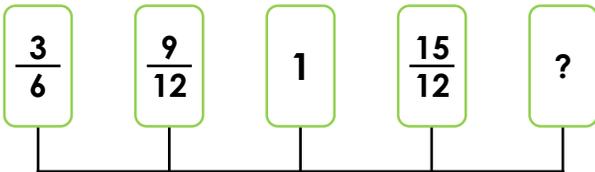
Write the next fractions in the sequence.



\_\_\_\_\_ and \_\_\_\_\_

VF

10a. Which fraction comes next in the sequence below? Circle the correct answer.

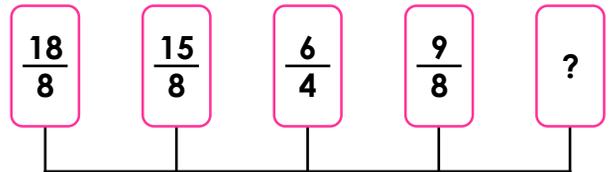


$\frac{8}{6}$     $\frac{16}{12}$     $\frac{9}{6}$



VF

10b. Which fraction comes next in the sequence below? Circle the correct answer.

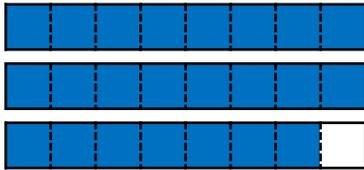


$\frac{5}{8}$     $\frac{3}{4}$     $\frac{7}{8}$



VF

11a. What fraction is represented by the bar model below?

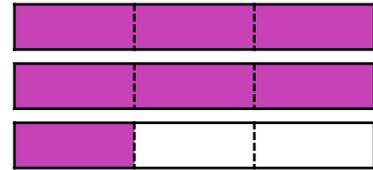


Write the next two fractions needed if the sequence decreases by  $\frac{1}{4}$  each time.



VF

11b. What fraction is represented by the bar model below?

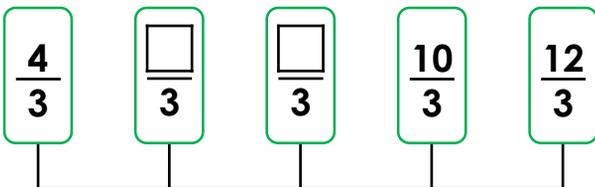


Write the next two fractions needed if the sequence increases by  $\frac{4}{6}$  each time.



VF

12a. Complete the sequence.

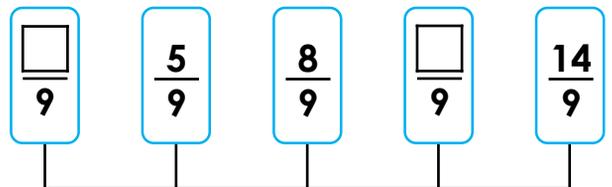


Rewrite the sequence using mixed numbers.



VF

12b. Complete the sequence.



Rewrite the sequence using mixed numbers.



VF

## Varied Fluency Count in Fractions

### Developing

- 1a.  $\frac{5}{6}$  and  $\frac{6}{6}$  should be shaded.
- 2a.  $\frac{7}{6}$
- 3a.  $1\frac{3}{8}$ ; the next two numbers in the sequence are  $1\frac{4}{8}$  and  $1\frac{5}{8}$ .
- 4a.  $\frac{2}{3}$  and  $\frac{5}{3}$ ; the sequence is  $\frac{1}{3}$ ,  $\frac{2}{3}$ , 1,  $1\frac{1}{3}$  and  $1\frac{2}{3}$ .

### Expected

- 5a.  $\frac{8}{12}$  and  $\frac{5}{12}$  should be shaded.
- 6a.  $\frac{14}{9}$
- 7a.  $2\frac{5}{6}$ ; the next two numbers in the sequence are  $2\frac{3}{6}$  and  $2\frac{1}{6}$ .
- 8a.  $\frac{7}{3}$  and  $\frac{9}{3}$ ; the sequence is  $\frac{1}{3}$ , 1,  $1\frac{2}{3}$ ,  $2\frac{1}{3}$  and 3.

### Greater Depth

- 9a.  $1\frac{2}{8}$  and 2
- 10a.  $\frac{9}{6}$
- 11a.  $2\frac{7}{8}$ ; the next two numbers in the sequence are  $2\frac{5}{8}$  and  $2\frac{3}{8}$ .
- 12a.  $\frac{6}{3}$  and  $\frac{8}{3}$ ; the sequence is  $1\frac{1}{3}$ , 2,  $2\frac{2}{3}$ ,  $3\frac{1}{3}$  and 4.

## Varied Fluency Count in Fractions

### Developing

- 1b.  $\frac{6}{8}$  and  $\frac{7}{8}$  should be shaded.
- 2b. 1
- 3b.  $1\frac{1}{3}$ ; the next two numbers in the sequence are  $1\frac{2}{3}$  and 2.
- 4b.  $\frac{3}{6}$  and  $\frac{6}{6}$ ; the sequence is  $\frac{3}{6}$ ,  $\frac{4}{6}$ ,  $\frac{5}{6}$ , 1 and  $1\frac{1}{6}$ .

### Expected

- 5b.  $\frac{4}{6}$  and  $\frac{6}{6}$  should be shaded.
- 6b.  $\frac{10}{10}$
- 7b.  $1\frac{3}{8}$ ; the next two numbers in the sequence are  $1\frac{6}{8}$  and  $2\frac{1}{8}$ .
- 8b.  $\frac{7}{4}$  and  $\frac{9}{4}$ ; the sequence is  $\frac{3}{4}$ ,  $1\frac{1}{4}$ ,  $1\frac{3}{4}$ ,  $2\frac{1}{4}$  and  $2\frac{3}{4}$ .

### Greater Depth

- 9b.  $1\frac{2}{10}$  and  $1\frac{8}{10}$
- 10b.  $\frac{3}{4}$
- 11b.  $2\frac{1}{3}$ ; the next two numbers in the sequence are 3 and  $3\frac{2}{3}$ .
- 12b.  $\frac{2}{9}$  and  $\frac{11}{9}$ ; the sequence is  $\frac{2}{9}$ ,  $\frac{5}{9}$ ,  $\frac{8}{9}$ ,  $1\frac{2}{9}$  and  $1\frac{5}{9}$ .