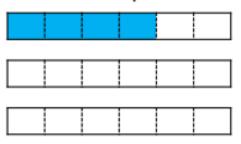
Challenge 1

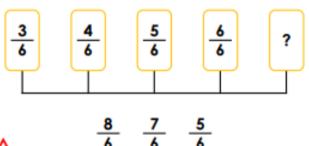
1a. A sequence increases by $\frac{1}{6}$ each time.

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



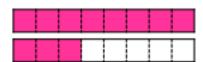


2a. Which fraction comes next in the sequence below? Circle the correct answer.





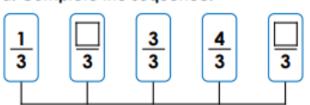
3a. What fraction is represented by the bar model below?



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



4a. Complete the sequence.



Rewrite the sequence using mixed numbers.



1b. Choose three fractions to create a sequence which increases by $\frac{1}{4}$ each time.

$$\frac{1}{4} \quad \frac{3}{4} \quad \frac{5}{4} \quad \frac{7}{4} \quad \frac{4}{4}$$

Place the fractions on the number line and record as mixed numbers below.



3b. Carys has written the following sequence:

$$1\frac{1}{4}$$
, $1\frac{2}{4}$, $1\frac{3}{4}$



The next number will be 2.

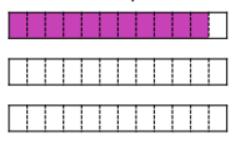
Is she correct?
Explain your answer.



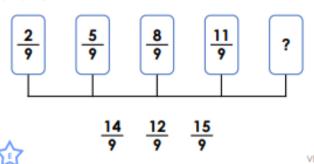
Challenge 2

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

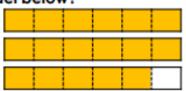
Shade the bar models to show the next two fractions in the sequence.



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



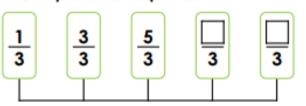
7a. What fraction is represented by the bar model below?



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



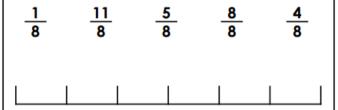
8a. Complete the sequence.



Rewrite the sequence using mixed numbers.



4a. Choose three fractions to create a sequence which decreases by $\frac{3}{8}$ each time.



Place the fractions on the number line and record as mixed numbers below.



VF

4b. Choose three fractions to create a sequence which increases by $\frac{2}{5}$ each time.

$$\frac{3}{5} \qquad \frac{5}{5} \qquad \frac{4}{5} \qquad \frac{8}{5} \qquad \frac{6}{5}$$

Place the fractions on the number line and record as mixed numbers below.



6a. Alice has written the following sequence:

2,
$$1\frac{3}{5}$$
, $1\frac{1}{5}$



The next number will be 1.

PS

Is she correct?

Explain your answer.



Challenge 3

Count in Fractions

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

Write the next two fractions in the sequence.

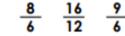




and

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







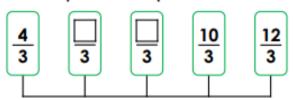
11a. What fraction is represented by the bar model below?



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



12a. Complete the sequence.



Rewrite the sequence using mixed numbers.



7b. Choose three fractions to create a sequence which increases by $\frac{1}{2}$ each time.

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

Place the fractions on the number line and record as mixed numbers below.



8b. If a sequence starts at $2\frac{5}{12}$ and the fifth number is less than $1\frac{3}{6}$, what could the number be?



Explain your answer.



9b. Brad has written the following sequence:



 $\frac{5}{7}$, $1\frac{1}{7}$, $1\frac{4}{7}$

The next number will be 2.

ls he correct? Explain your answer.



Extension

Here is a number sequence.

$$\frac{5}{12}$$
, $\frac{7}{12}$, $\frac{10}{12}$, $\frac{14}{12}$, $\frac{19}{12}$,

Which fraction would come next?
Can you write the fraction in more than one way?

Circle and correct the mistakes in the sequences.

$$\frac{5}{12}$$
, $\frac{8}{12}$, $\frac{11}{12}$, $\frac{15}{12}$, $\frac{17}{12}$

$$\frac{9}{10}$$
, $\frac{7}{10}$, $\frac{6}{10}$, $\frac{3}{10}$, $\frac{1}{10}$

Play the fraction game for four players.
Place the four fraction cards on the floor.
Each player stands in front of a fraction.
We are going to count up in tenths
starting at 0

When you say a fraction, place your foot on your fraction.

$$\begin{array}{c|c}
\frac{1}{10} & \frac{2}{10} \\
\hline
\frac{3}{10} & \frac{5}{10}
\end{array}$$

How can we make 4 tenths?
What is the highest fraction we can count to?

How about if we used two feet?