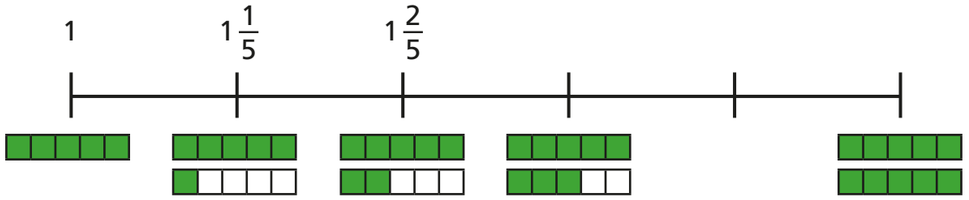
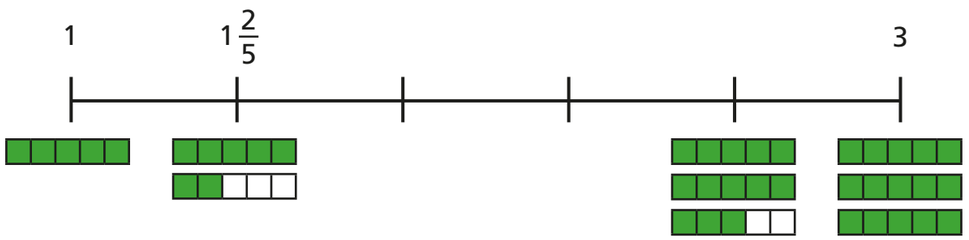
Number sequences

1 Complete the number lines.

a)

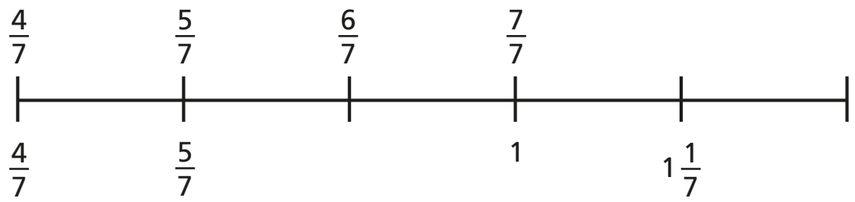


b)

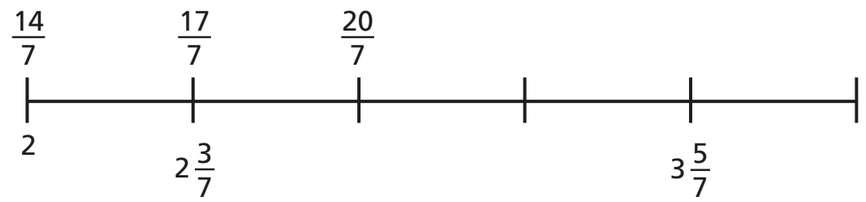


2 Complete the number lines.

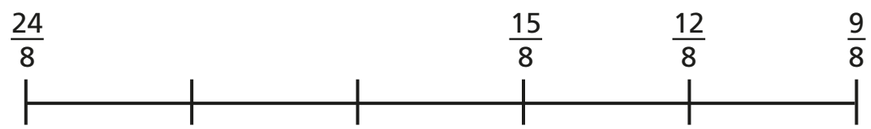
a)



b)



c)



3 Continue the sequences.

a) $2\frac{7}{8}$, $3\frac{1}{8}$, $3\frac{3}{8}$, ☐, ☐, ☐

b) $5\frac{6}{7}$, $5\frac{3}{7}$, 5, ☐, ☐, ☐

c) $5\frac{6}{11}$, $5\frac{3}{11}$, 5, ☐, ☐, ☐

What is the same and what is different about the sequences in parts b) and c)?

Talk about it with a partner.

4 Match each sequence to its rule.

$2\frac{2}{3}, 3\frac{1}{3}, 4, 4\frac{2}{3}$	add three quarters
$2\frac{1}{2}, 3\frac{1}{4}, 4, 4\frac{3}{4}$	subtract two thirds
$4\frac{1}{3}, 3\frac{2}{3}, 3, 2\frac{1}{3}$	add two thirds
$4\frac{1}{4}, 3\frac{3}{4}, 3\frac{1}{4}, 2\frac{3}{4}$	subtract one half

5 Teddy and Rosie are finding the missing numbers in the sequence.

3, ☐, ☐, ☐, ☐, ☐, ☐, ☐, 4

a)

I think the missing fractions are sevenths because there are seven blank number cards.

Do you agree with Teddy? _____

Explain your answer.

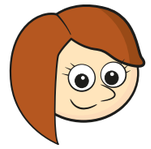
_____

_____

b) Complete the sequence.

3, ☐, ☐, ☐, ☐, ☐, ☐, ☐, 4

c)



I think one of the missing fractions is equivalent to $3\frac{1}{2}$

Is Rosie correct? _____

Explain how you know.

_____

_____

d) Which other fractions in the sequence can you find equivalent fractions for?

6

I am thinking of a number sequence. The 1st and 4th terms are consecutive integers.

Write the rule for Amir's sequence.

_____

_____