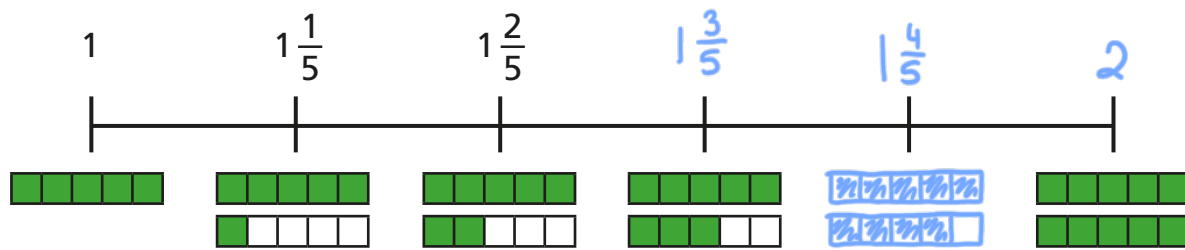


Number sequences

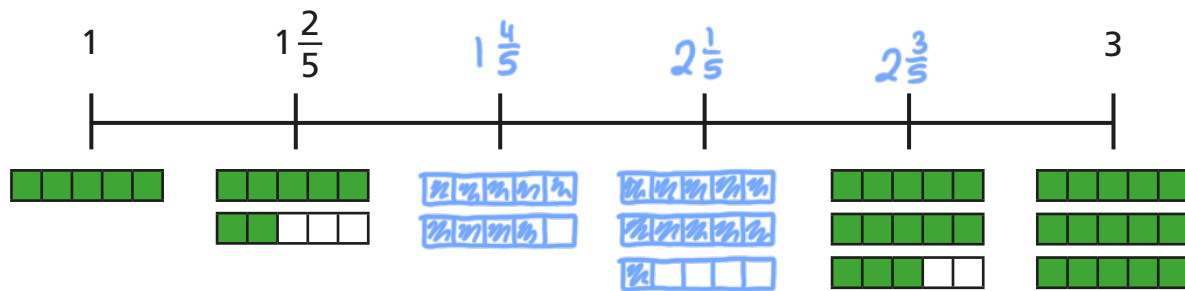


1 Complete the number lines.

a)

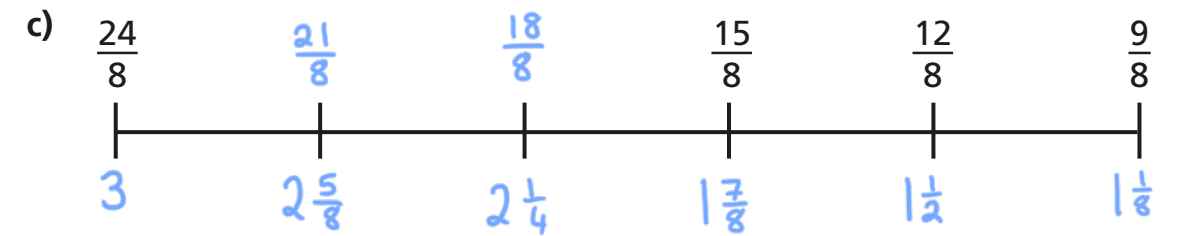
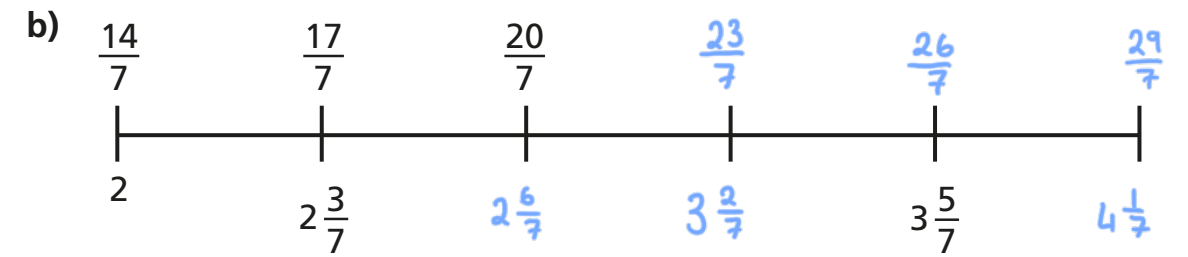
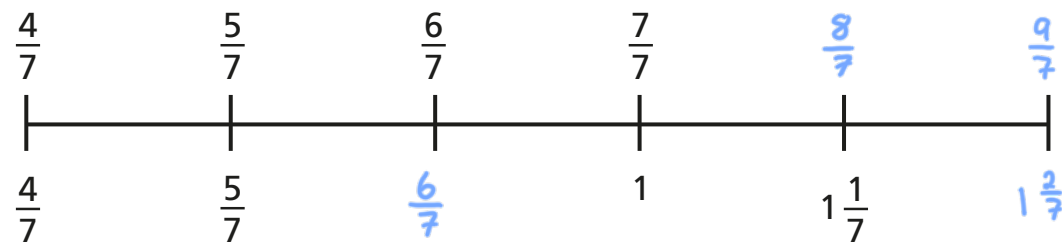


b)



2 Complete the number lines.

a)



3 Continue the sequences.

a) $2\frac{7}{8}$, $3\frac{1}{8}$, $3\frac{3}{8}$, $3\frac{5}{8}$, $3\frac{7}{8}$, $4\frac{1}{8}$

b) $5\frac{6}{7}$, $5\frac{3}{7}$, 5, $4\frac{4}{7}$, $4\frac{1}{7}$, $3\frac{5}{7}$

c) $5\frac{6}{11}$, $5\frac{3}{11}$, 5, $4\frac{8}{11}$, $4\frac{5}{11}$, $4\frac{2}{11}$

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

Talk about it with a partner.



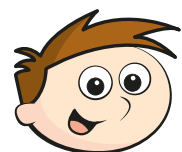
4 Match each sequence to its rule.

$2\frac{2}{3}, 3\frac{1}{3}, 4, 4\frac{2}{3}$	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? No

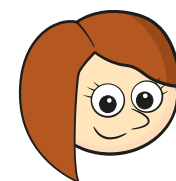
Explain your answer.

If they were sevenths there would only be 6 blank cards because $3\frac{7}{7} = 4$

b) Complete the sequence.

3, $3\frac{1}{8}$, $3\frac{2}{8}$, $3\frac{3}{8}$, $3\frac{4}{8}$, $3\frac{5}{8}$, $3\frac{6}{8}$, $3\frac{7}{8}$, 4

c)



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

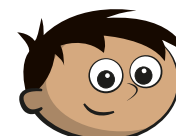
Is Rosie correct? Yes

Explain how you know.

$\frac{4}{8}$ is equivalent to $\frac{1}{2}$ so $3\frac{4}{8}$ is equivalent to $3\frac{1}{2}$.

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.

Add one third. (Accept subtract one third)