

Blue - Answers

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



a)



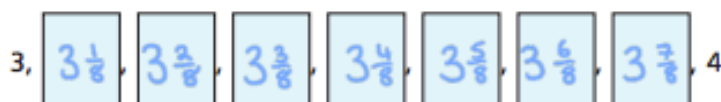
I think the missing fractions are sevenths because there are seven blank number cards.

Do you agree with Teddy? No

Explain your answer.

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

b) Complete the sequence.



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?



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)

1) There are many different possibilities. Three possible sequences are shown below:

$3\frac{1}{2}$, $4\frac{1}{4}$, 5, $5\frac{6}{8}$, $6\frac{1}{2}$ (This sequence is increasing by $\frac{6}{8}$.)

$5\frac{3}{8}$, $5\frac{6}{8}$, $6\frac{1}{8}$, $6\frac{1}{2}$, $6\frac{7}{8}$, $7\frac{1}{4}$ (This sequence is increasing by $\frac{3}{8}$.)

$9\frac{10}{12}$, $9\frac{1}{4}$, $8\frac{8}{12}$, $8\frac{1}{2}$, $7\frac{1}{2}$ (This sequence is decreasing by $\frac{7}{12}$.)

2) There are a number of different possibilities. Three possible sequences are shown below:

$4\frac{3}{4}$, $5\frac{3}{8}$, 6, $6\frac{5}{8}$, $7\frac{1}{4}$ (This sequence is increasing by $\frac{5}{8}$.)

$4\frac{3}{4}$, $5\frac{1}{4}$, $5\frac{3}{4}$, $6\frac{1}{4}$, $6\frac{3}{4}$, $7\frac{1}{4}$ (This sequence is increasing by $\frac{1}{2}$.)

$4\frac{3}{4}$, $5\frac{7}{12}$, $6\frac{5}{12}$, $7\frac{1}{4}$ (This sequence is increasing by $\frac{10}{12}$.)



