26.01.21

Simplifying Fractions

Answers

1. $\frac{6}{10} = \frac{3}{5}$

So, $4\frac{6}{10} = 4\frac{3}{5}$

2. a) $\frac{2}{5}$

$1\frac{2}{5}$

$2\frac{2}{5}$

$32\frac{2}{5}$

b) $\frac{3}{5}$

$\frac{3}{5}$

$\frac{3}{5}$

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

Descriptions of patterns may vary, for example:
In part a) I noticed that the fraction part stayed the same, just the whole number changed.
In part b) I noticed that the first three fractions gave the same answer – they are all equivalent. The last fraction swapped the digits in the numerator and denominator and so made an improper fraction which could then be converted to a mixed number.

3. a) Emma has not simplified fully as she has not used the highest common factor. She needs to simplify further by dividing both the numerator and denominator by 3 to give $\frac{1}{2}$.

b) Emma has swapped the numerator and denominator when simplifying. The fraction correctly simplified is $\frac{2}{1}$ or just 2.

c) Emma has simplified the fraction part correctly by dividing the numerator and denominator by 2, however she has also divided the whole number part by 2 which is wrong. $8\frac{4}{10}$ should simplify to $8\frac{2}{5}$.

4. a) $6\frac{2}{3}$ c) $15\frac{1}{2}$ e) $2\frac{1}{2}$

b) $\frac{5}{12}$ d) $\frac{7}{11}$ f) $1\frac{1}{4}$

5. $\frac{42}{30}$

6. $\frac{20}{40}$

a) $\frac{67}{16}$ or $4\frac{3}{16}$

b) $\frac{419}{48}$ or $8\frac{35}{48}$

C) They are the same (to convert 288/160 to 5ths you need to divide both parts of the fraction by 32. 288 divided by 32 = 9 so they are both 9/5)