1) 


2) $\frac{1}{5}=\frac{2}{10}$
$\frac{1}{5}=\frac{4}{20}$
$\frac{1}{5}=\frac{8}{40}$
$\frac{2}{5}=\frac{4}{10}$
$\frac{4}{10}=\frac{8}{20} \quad \frac{16}{40}=\frac{4}{10}$
3)

| Start | $\left(\frac{1}{3}\right)$ | $\frac{8}{15}$ | $\frac{3}{57}$ | $\frac{3}{7}$ | $\frac{12}{16}$ | $\frac{5}{9}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\frac{10}{20}$ | $\frac{2}{4}$ | $\left(\frac{2}{6}\right)$ | $\left(\frac{6}{18}\right)$ | $\left(\frac{12}{36}\right)$ | $\left(\frac{24}{72}\right)$ | $\frac{4}{5}$ |
| $\frac{7}{8}$ | $\frac{11}{28}$ | $\frac{1}{9}$ | $\frac{3}{10}$ | $\frac{10}{100}$ | $\frac{46}{126}$ | $\left(\frac{48}{144}\right)$ |
| $\frac{50}{100}$ | $\frac{13}{20}$ | $\frac{6}{12}$ | $\frac{1}{8}$ | $\frac{3}{5}$ | $\frac{96}{157}$ | Finish |

1) $B$ is the odd one out because it is equivalent to one half. $A, C$ and $D$ are all equivalent to one quarter.
2) 

| Child | Equivalent Fraction | $\checkmark$ or X | Explanation |
| :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { Selma } \\ & \frac{1}{12}^{=}=\frac{1}{6} \end{aligned}$ | $\frac{1}{12}$ | X | Selma has multiplied the denominator by 2 but has forgotten to multiply the numerator by 2. |
| $\begin{aligned} & \text { Logan } \\ & \frac{3}{12}^{=}=\frac{1}{6} \end{aligned}$ | $\frac{3}{12}$ | X | Logan has multiplied the numerator by 3 and the denominator by 2. |
| $\begin{gathered} \text { Beth } \\ \frac{4}{24}=\frac{1}{6} \end{gathered}$ | $\frac{4}{24}$ | $\checkmark$ | Beth is correct. She has multiplied the numerator and the denominator by 4 giving her an equivalent fraction of $\frac{4}{24}$. |

1) a) $\frac{8}{32}$ The numerator and denominator are being multiplied by 2 each time.
b) $\frac{1000}{5000}$ The numerator and denominator are being multiplied by 10 each time.
c) $\frac{120}{240}$ The numerator and denominator are being multiplied by I more each time, e.9. $\times 2, \times 3, \times 4$. To find the next fraction, you need to multiply the numerator and denominator by 5 .
d) Various answers possible. Check that the children have written sequences of equivalent fractions.
2) Children should explain with the aid of a diagram that each girl would receive two thirds of cake and that each boy would receive four sixths of cake. They may then go on to explain that two thirds and four sixths are equivalent so the children would be eating the same amount of cake.
