1) 

| Pictorial <br> Representation | Fraction | Words |
| :---: | :---: | :---: |
|  | $\frac{1}{3}=\frac{3}{9}$ | One half is <br> equivalent to <br> two quarters. |
| One third is <br> equivalent to <br> three ninths. |  |  |
|  | $\frac{3}{12}=\frac{1}{4}$ | Three twelfths <br> is equivalent to <br> one quarter. |

2) 


$\frac{6}{8}$

3) $\frac{1}{3}=\frac{2}{6}=\frac{3}{9}=\frac{4}{12}$
1)

2) $C$ and $D$ are the odd ones out as they are not equivalent to $\frac{3}{4}$. C represents $\frac{3}{5}$ and $D$ represents $\frac{2}{3}$.
3)
A)
B)
C) $\frac{5}{10}=\frac{1}{2}$
$\frac{1}{2}=\frac{2}{4}$
$\frac{4}{6}=\frac{4}{12}$
D)
$\frac{1}{1}=\frac{2}{2}$

There are many possible answers. Example: $\frac{4}{6}=\frac{2}{3}$ or $\frac{4}{12}=\frac{1}{3}$
4) Erin is incorrect. The numerator is sometimes a multiple of $2 . \frac{2}{6}$ and $\frac{4}{12}$ are equivalent to $\frac{1}{3}$ and 2 and 4 are multiples of 2. However, $\frac{3}{9}$ and $\frac{5}{15}$ are equivalent to $\frac{1}{3}$ but 3 and 5 are not multiples of 2 . Children may have used other examples in their reasoning.

1) Liam is incorrect as there are a variety of equivalent fractions he can make using the digit cards.
$\begin{array}{lll}\frac{1}{4} & \frac{4}{16} & \frac{8}{32}\end{array}$
2) Nick is incorrect as the shaded fraction represents $\frac{1}{2}$. Fractions that are equivalent to $\frac{1}{2}$ must have a denominator that is a multiple of $\mathbf{2}$ (an even number) as the numerator will be half of this number. Halved odd numbers are not whole.
3) Nadia is incorrect. Here are the fractions equivalent to $\frac{1}{3}$ and the difference between their numerators and denominators.
$\frac{1}{3}$ (difference of 2 )
$\frac{2}{6}$ (difference of 4)
$\frac{3}{9}$ (difference of 6)
$\frac{4}{12}$ (difference of 8)
$\frac{5}{15}$ (difference of 10)
$\frac{6}{18}$ (difference of 12)

The difference between the numerator and the denominator increases by $\mathbf{2}$ each time.

