1) $\frac{2}{3}$

2) a) $\frac{5}{3}$ or $1\frac{2}{3}$

b) $\frac{11}{6}$ or $1\frac{1}{3}$

3) a) $\frac{4}{5} + \frac{5}{5} = \frac{9}{5}$ or $1\frac{4}{5}$

b) $\frac{4}{5} + \frac{3}{5} + \frac{1}{5} = \frac{8}{5}$ or $1\frac{3}{5}$

3) a) $\frac{11}{4}$ or $2\frac{3}{4}$

b) $\frac{12}{4}$ or 3

Children may have marked jumps on the number line to help them solve each calculation.

1) The numerators have been added together to make 6, which is correct, but then the denominators have also been added together to make 21, which is a mistake. When adding fractions with the same denominator, the denominator remains the same. Only the numerators are added together.

2) a) $\frac{5}{8} + \frac{3}{8} = \frac{8}{8}$ or 1 whole

b) $\frac{12}{10} + \frac{8}{10} = \frac{20}{10}$ or 2 whole ones

c) $\frac{90}{100} + \frac{10}{100} = 1$ whole

B is the odd one out because it equals 2 whole ones whereas A and C both make one whole.

3) Lilah is incorrect. Her model shows she has only added $\frac{2}{6}$ and $\frac{5}{6}$, which would give the answer $\frac{7}{6}$. She needs to add the third fraction as well to give the answer $\frac{10}{6}$.

Carl is incorrect. His model shows that he has added 3 fractions together but his number line shows the calculation $\frac{2}{6} + \frac{5}{6} + \frac{4}{6}$ which gives the answer $\frac{11}{6}$, instead of $\frac{10}{6}$.

Nadia is correct. Her model represents the calculation $\frac{2}{6} + \frac{5}{6} + \frac{3}{6}$, which gives the answer $\frac{10}{6}$.