## Fractions against the clock

Write as many of these improper fractions as mixed numbers as you can in five minutes, e.g. write $\frac{11}{5}$ as $2 \frac{1}{5}$.

| (1) $\frac{12}{5}$ | $2 \frac{2}{5}$ | (5) $\frac{7}{4}$ | $1 \frac{3}{4}$ | (9) $\frac{9}{4}$ | $2 \frac{1}{4}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| (2) $\frac{13}{6}$ | $2 \frac{1}{6}$ | (6) $\frac{17}{10}$ | $1 \frac{7}{10}$ | (10) $\frac{23}{7}$ | $3 \frac{2}{7}$ |
| (3) $\frac{13}{8}$ | $1 \frac{5}{8}$ | (7) $\frac{11}{7}$ | $1 \frac{4}{7}$ | (11) $\frac{19}{8}$ | $2 \frac{3}{8}$ |
| (4) $\frac{14}{3}$ | $4 \frac{2}{3}$ | (8) $\frac{20}{9}$ | $2 \frac{2}{4}$ | (12) $\frac{20}{3}$ | $6 \frac{2}{3}$ |

To write $\frac{19}{6}$ as a mixed number, think how many $\frac{1}{8}$ s are in one whole. in two wholes...

## Expected

$5 \mathrm{a} . \mathrm{A}=2 \frac{2}{5}=\frac{12}{5} ; \mathrm{B}=2 \frac{2}{3}=\frac{8}{3}$;
$C=3 \frac{1}{9}=\frac{28}{9}$
6a. False: $4 \frac{1}{11}=\frac{45}{11}$
7a. $5 \frac{8}{12}$ and $\frac{68}{12}$
8a. A

## Expected

5b. $A=3 \frac{3}{4}=\frac{15}{4} ; B=2 \frac{3}{7}=\frac{17}{7}$;
$C=2 \frac{8}{11}=\frac{30}{11}$
6b. True
7b. $5 \frac{9}{10}$ and $\frac{59}{10}$
8b. C

## Greater Depth

7a. $6 \frac{9}{12}=\frac{27}{4}$
8a. Various possible answers, for example: $3 \frac{8}{10}$ because the others both have a denominator of 2 as simplified improper fractions.
9a. Mai is incorrect; $7 \frac{8}{12}=\frac{23}{3}$. Accept answers which use diagrams to prove this.

## Greater Depth

7b. $7 \frac{2}{8}=\frac{29}{4}$
8b. Various possible answers, for example: $4 \frac{9}{12}$ because the others both have a denominator of 3 as simplified improper fractions.

9b. Kyle is correct. Accept answers which use diagrams to prove this.

