## Decimals as Fractions

1. Tick the statements that are correct.
A.
$0.2=\frac{2}{5}$ $\square$
B.
$0.3=\frac{3}{10}$ $\square$
C. 0.5
$=\frac{1}{2}$ $\square$
D. $0.4=\frac{2}{5}$ $\square$
2. Convert the decimals to find the fractions that, when written in their simplest form, have an even number as their numerator.
A.

B.

c.

D.
0.8
3. Haruko and Chiney are discussing converting decimals into fractions.


Haruko


Chiney

Who is correct? Explain your reasoning.

## Decimals as Fractions

4. Tick the statements that are correct.
A. $0.28=\frac{7}{25}$ $\square$
B. $0.06=\frac{6}{10}$ $\square$
C. $0.45=\frac{9}{20}$ $\square$
D. $0.37=\frac{37}{100}$ $\square$
5. Convert the decimals to find the fractions that, when written in their simplest form, have a prime number as their numerator.
A.

B.

C.

D.
0.55
6. Devin and Rhian are discussing converting decimals into fractions.

$$
0.15
$$



Who is correct? Explain your reasoning.
7. Convert the decimals below into mixed numbers in their simplest forms and complete the statement.

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8. Complete the decimals so that, when converted to mixed numbers in their simplest forms, the numerators are prime numbers.

9. Kian and Nusra are discussing converting decimals into simplified mixed numbers.


Who is correct? Explain your reasoning.

## Developing

1. B, C and D
2. A. $\frac{7}{10}$, B. $\frac{1}{2}$, C. $\frac{2}{5}$, D. $\frac{4}{5}$; C and D have even numbers as their numerators.
3. Chiney is correct because 0.2 is equivalent to $\frac{2}{10}$ which is equivalent to $\frac{1}{5} \cdot \frac{1}{2}$ is equivalent to $\frac{5}{10}$ or 0.5 .

## Expected

4. A, C and D
5. A. $\frac{8}{25}$, B. $\frac{1}{20}$, C. $\frac{3}{4}$, D. $\frac{11}{20}$; C and D have prime numbers as their numerators.
6. Both children are correct because 0.15 is equivalent to $\frac{15}{100}$ or $\frac{3}{20}$. Rhian's fraction is in it's simplest form.

## Greater Depth

7. $1 \frac{9}{20}>1 \frac{11}{25}>1 \frac{37}{100}$
8. Various answers, for example: 1.52 becomes $1 \frac{13}{25} ; 2.38$ becomes $2 \frac{19}{50}$.
9. Nusra is correct because 2.06 is equivalent to $2 \frac{3}{50} \cdot 1.15$ is equivalent to $1 \frac{3}{20} \cdot 1.15$ does not have an equivalent with a denominator of 50 .
