Homework
Recognise Equivalent Fractions

National Curriculum Objectives:

Mathematics Year 5: (5F2b) Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths

Differentiation:

Questions 1, 4 and 7 (Varied Fluency)
Developing Tick the shaded shapes which match the unit fraction using pictorial support where the original denominator is represented first.
Expected Tick the shaded shapes which match the non-unit fraction using pictorial support where the original denominator is represented first.
Greater Depth Tick the shaded shapes which match the given non-unit fraction using pictorial support where the image represents a multiple of the denominator.

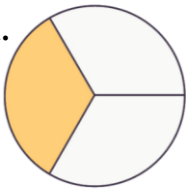
Questions 2, 5 and 8 (Varied Fluency)
Developing Complete the sequence of fractions which are equivalent to unit fractions. Pictorial support.
Expected Complete the sequence of fractions which are equivalent to non-unit fractions. Pictorial support.
Greater Depth Complete the sets of fractions which are equivalent to non-unit fractions and some are non-sequential. No pictorial support.

Questions 3, 6 and 9 (Reasoning and Problem Solving)
Developing Explain the mistake made when shading a unit fraction of the shapes where the original denominator is represented first.
Expected Explain the mistake made when shading a non-unit fraction of the shape.
Greater Depth Explain the mistake when shading a non-unit fraction of the shape where the image represents a multiple of the denominator and some parts are merged.

Recognise Equivalent Fractions

1. Tick the shapes that have $\frac{1}{3}$ shaded.

A.



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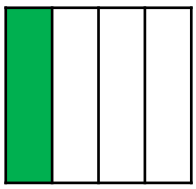
B.



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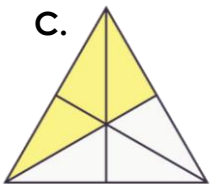
C.



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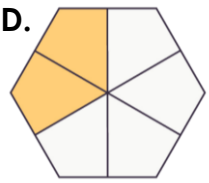
D.



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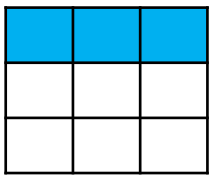
E.



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D

VF
HW/Ext

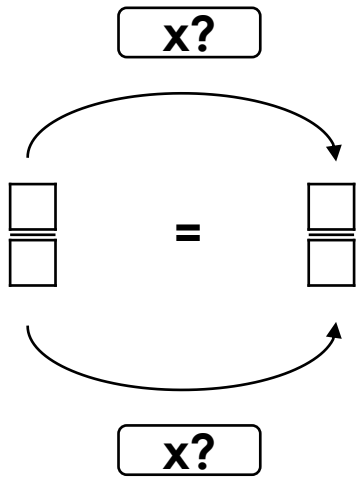
2. Complete the sequence of equivalent fractions. Use the diagram to help you.

A.

$$\frac{1}{4} = \frac{2}{\square} = \frac{\square}{12} = \frac{4}{\square}$$

B.

$$\frac{1}{5} = \frac{\square}{10} = \frac{3}{\square} = \frac{\square}{20}$$

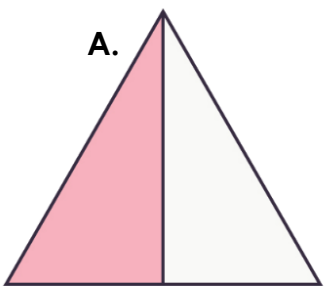


D

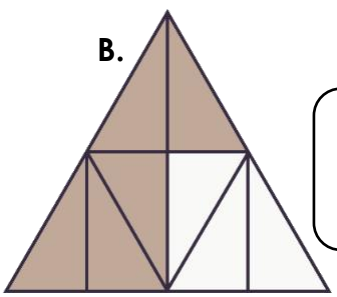
VF
HW/Ext

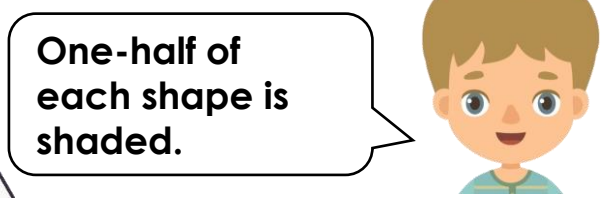
3. Ben shades these shapes. He says,

A.



B.





Explain his mistake.

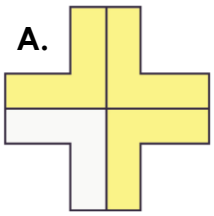
D

RPS
HW/Ext

Recognise Equivalent Fractions

4. Tick the shapes that have $\frac{3}{4}$ shaded.

A.



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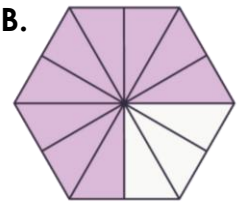
B.



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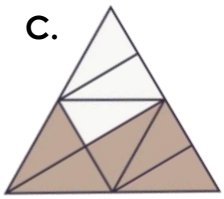
C.



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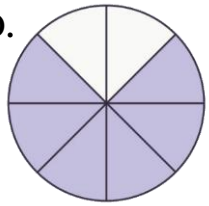
D.



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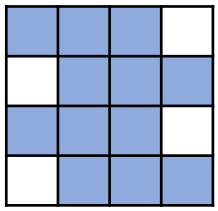
E.



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E

VF
HW/Ext

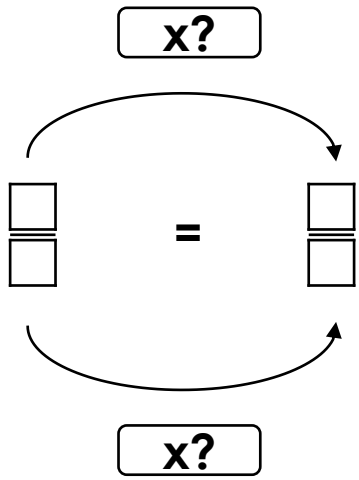
5. Complete the sequence of equivalent fractions. Use the diagram to help you.

A.

$$\frac{4}{6} = \frac{8}{\square} = \frac{\square}{18} = \frac{16}{\square}$$

B.

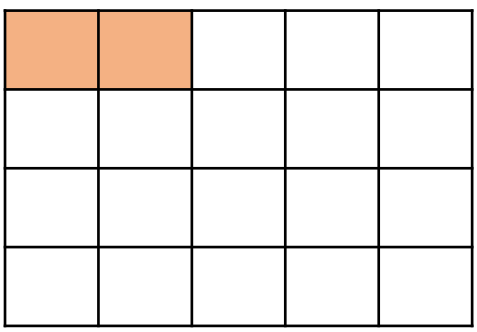
$$\frac{3}{8} = \frac{\square}{16} = \frac{9}{\square} = \frac{\square}{32}$$



E

VF
HW/Ext

6. Jasmin shades this shape. She says,



Explain her mistake.

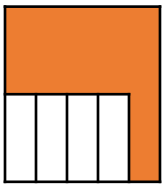
E

RPS
HW/Ext

Recognise Equivalent Fractions

7. Tick the shapes that have $\frac{3}{5}$ shaded.

A.



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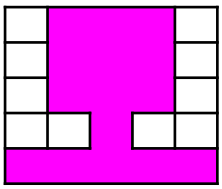
B.



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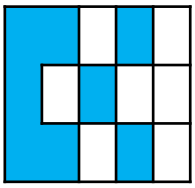
C.



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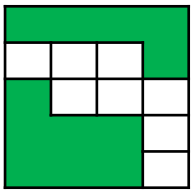
D.



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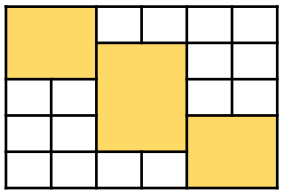
E.



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GD

VF
HW/Ext

8. Complete the sets of equivalent fractions.

A.

$$\frac{\square}{\square} = \frac{\square}{16} = \frac{21}{24} = \frac{\square}{40} = \frac{63}{\square}$$

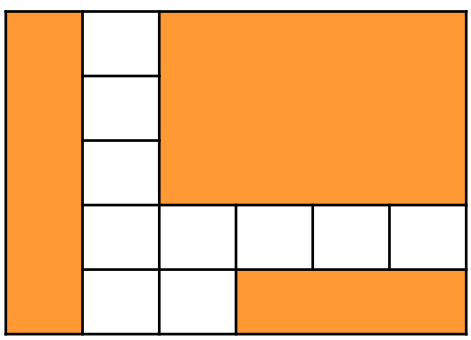
B.

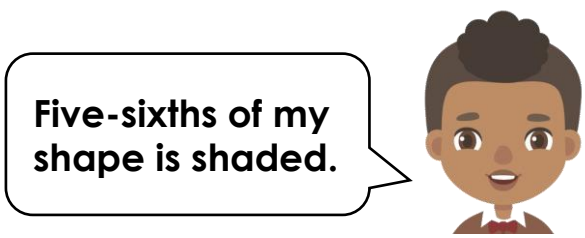
$$\frac{\square}{\square} = \frac{8}{\square} = \frac{12}{27} = \frac{28}{\square} = \frac{\square}{81}$$

GD

VF
HW/Ext

9. Carl shades this shape. He says,





Explain his mistake.

GD

RPS
HW/Ext

Homework
Recognise Equivalent Fractions

Developing

1. A, D and E

2. A. $\frac{1}{4} = \frac{2}{8} = \frac{3}{12} = \frac{4}{16}$ B. $\frac{1}{5} = \frac{2}{10} = \frac{3}{15} = \frac{4}{20}$

3. Ben has shaded 5 out of 8 parts on triangle B. He needed to shade 4 out of 8 squares as $\frac{4}{8} = \frac{1}{2}$. Triangle A correctly has one half shaded.

Expected

4. A, B, D and E

5. A. $\frac{4}{6} = \frac{8}{12} = \frac{12}{18} = \frac{16}{24}$ B. $\frac{3}{8} = \frac{6}{16} = \frac{9}{24} = \frac{12}{32}$

6. Jasmin has shaded 2 squares instead of 2 columns. She has shaded 2 out of 20 squares which is not equivalent to $\frac{2}{5}$. She needed to shade 8 out of 20 squares which is equivalent to $\frac{2}{5}$.

Greater Depth

7. A, B and D

8. A. $\frac{7}{8} = \frac{14}{16} = \frac{21}{24} = \frac{35}{40} = \frac{63}{72}$ B. $\frac{4}{9} = \frac{8}{18} = \frac{12}{27} = \frac{28}{63} = \frac{36}{81}$

9. Carl has shaded 20 out of 30 squares which is equivalent to $\frac{4}{6}$ or $\frac{2}{3}$. He needed to shade 25 out of 30 squares which is equivalent to $\frac{5}{6}$.