

# Homework/Extension

## Step 1: 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.

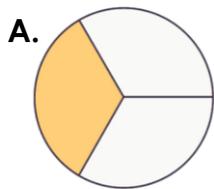
**Greater Depth** Explain the mistake when shading a non-unit fraction of the shape where the image represents a multiple of the denominator and some parts are merged.

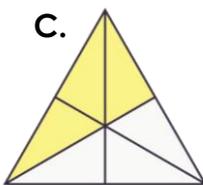
More [Year 5 Fraction](#) resources.

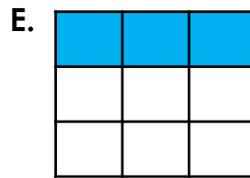
Did you like this resource? Don't forget to [review](#) it on our website.

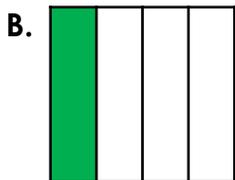
# Equivalent Fractions

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











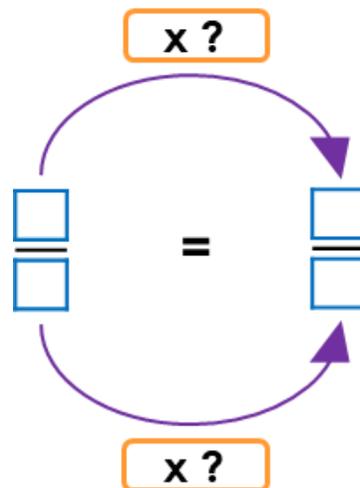


VF  
HW/Ext

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

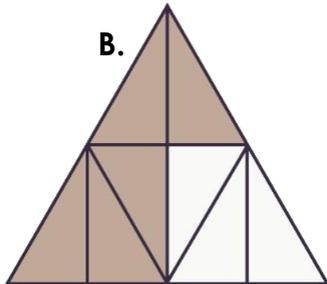
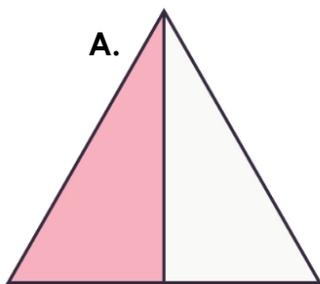
A.  $\frac{\boxed{1}}{\boxed{4}} = \frac{\boxed{2}}{\boxed{\phantom{00}}} = \frac{\boxed{\phantom{00}}}{\boxed{12}} = \frac{\boxed{4}}{\boxed{\phantom{00}}}$

B.  $\frac{\boxed{1}}{\boxed{5}} = \frac{\boxed{\phantom{00}}}{\boxed{10}} = \frac{\boxed{3}}{\boxed{\phantom{00}}} = \frac{\boxed{\phantom{00}}}{\boxed{20}}$



VF  
HW/Ext

3. Ben shades these shapes. He says,



One-half of each shape is shaded.

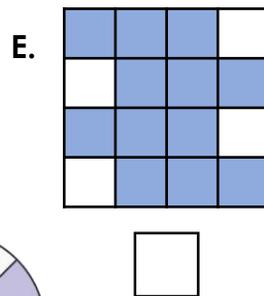
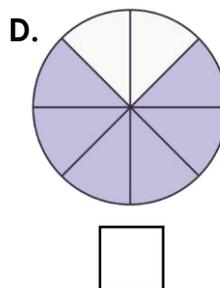
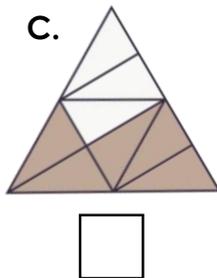
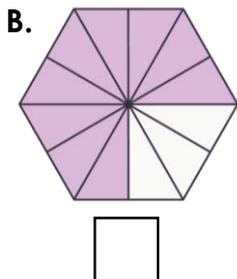
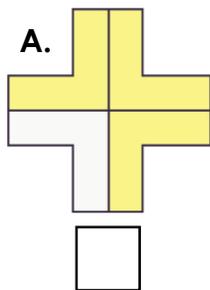
Explain his mistake.



RPS  
HW/Ext

# Equivalent Fractions

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

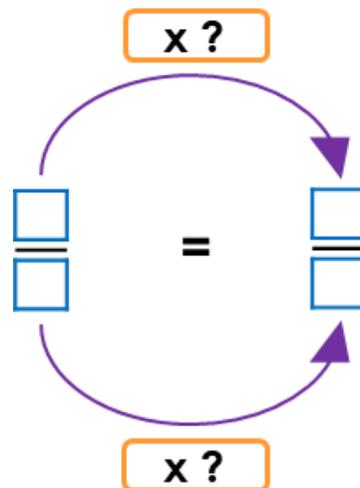


VF  
HW/Ext

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

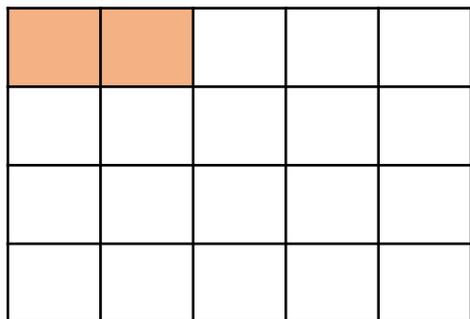
A.  $\frac{\boxed{4}}{\boxed{6}} = \frac{\boxed{8}}{\boxed{\quad}} = \frac{\boxed{\quad}}{\boxed{18}} = \frac{\boxed{16}}{\boxed{\quad}}$

B.  $\frac{\boxed{3}}{\boxed{8}} = \frac{\boxed{\quad}}{\boxed{16}} = \frac{\boxed{9}}{\boxed{\quad}} = \frac{\boxed{\quad}}{\boxed{32}}$



VF  
HW/Ext

6. Jasmin shades this shape. She says,



Two-fifths of my shape is shaded.

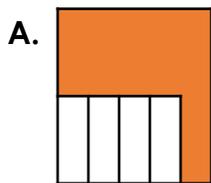
Explain her mistake.

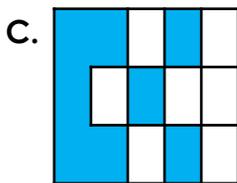


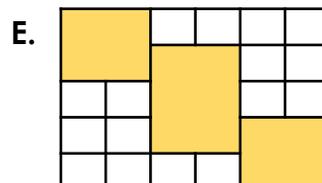
RPS  
HW/Ext

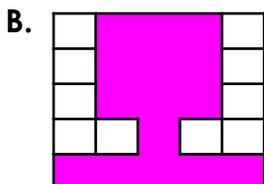
# Equivalent Fractions

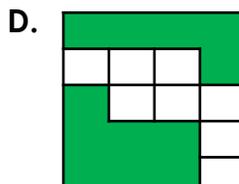
7. Tick the shapes that have  $\frac{3}{5}$  shaded.













VF  
HW/Ext

8. Complete the sets of equivalent fractions.

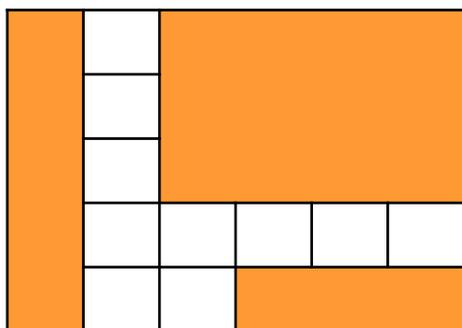
A.  $\frac{\boxed{\phantom{00}}}{\boxed{\phantom{00}}} = \frac{\boxed{\phantom{00}}}{16} = \frac{21}{24} = \frac{\boxed{\phantom{00}}}{40} = \frac{63}{\boxed{\phantom{00}}}$

B.  $\frac{\boxed{\phantom{00}}}{\boxed{\phantom{00}}} = \frac{8}{\boxed{\phantom{00}}} = \frac{12}{27} = \frac{28}{\boxed{\phantom{00}}} = \frac{\boxed{\phantom{00}}}{81}$



VF  
HW/Ext

9. Carl shades this shape. He says,



Five-sixths of my shape is shaded.



Explain his mistake.



RPS  
HW/Ext

# Homework/Extension

## 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  $\frac{5}{6}$ .**