Homework/Extension
Step 13: Divide Fractions by Integers 2

National Curriculum Objectives:

Mathematics Year 6: (6F2) Use common factors to simplify fractions; use common multiples to express fractions in the same denomination
Mathematics Year 6: (6F5b) Divide proper fractions by whole numbers [for example, 1/3 ÷ 2 = 1/6]

Differentiation:

Questions 1, 4 and 7 (Varied Fluency)
Developing Solve the calculation and complete the bar model. Includes division of unit fractions by integers where the numerator is not a multiple of the divisor and use of pictorial support.
Expected Solve the calculation and complete the bar model. Includes division of fractions by integers where the numerator is not a multiple of the divisor and use of pictorial support.
Greater Depth Solve the calculation and complete the bar model. Includes division of fractions by integers where the numerator is not a multiple of the divisor, with some use of mixed numbers and improper fractions.

Questions 2, 5 and 8 (Varied Fluency)
Developing Select the correct digit cards to complete the number sentence. Includes division of unit fractions by integers where the numerator is not a multiple of the divisor and use of pictorial support.
Expected Select the correct digit cards to complete the number sentence. Includes division of fractions by integers where the numerator is not a multiple of the divisor.
Greater Depth Select the correct digit cards to complete the number sentence. Includes division of fractions by integers where the numerator is not a multiple of the divisor, with some use of mixed numbers and improper fractions.

Questions 3, 6 and 9 (Reasoning and Problem Solving)
Developing Explain who is correct by completing the division sentence and drawing a model. Includes division of unit fractions by integers where the numerator is not a multiple of the divisor and use of pictorial support.
Expected Explain who is correct by completing the division sentence and drawing a model. Includes division of fractions by integers where the numerator is not a multiple of the divisor.
Greater Depth Explain who is correct by completing the division sentence and drawing a model. Includes division of fractions by integers where the numerator is not a multiple of the divisor, with some use of mixed numbers and improper fractions.

More Year 6 Fractions resources.

Did you like this resource? Don't forget to review it on our website.

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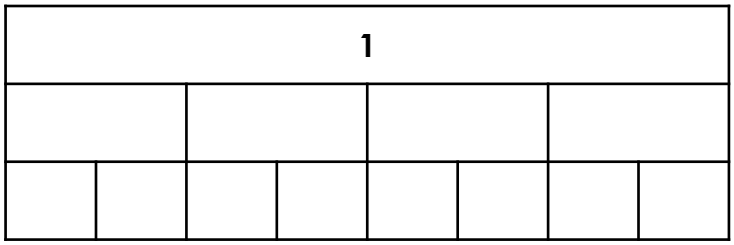
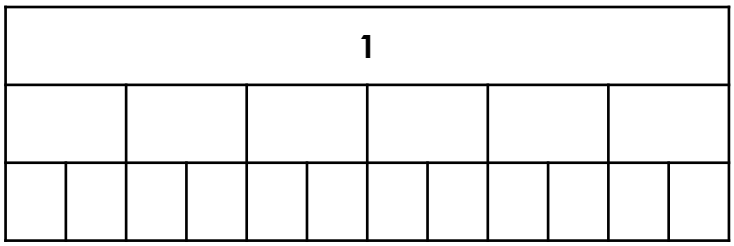
Divide Fractions by Integers 2

1. Complete the number sentences and fill in the bar models.

A. $\frac{1}{4} \div 2 = \frac{\square}{\square}$



B. $\frac{1}{6} \div 2 = \frac{\square}{\square}$

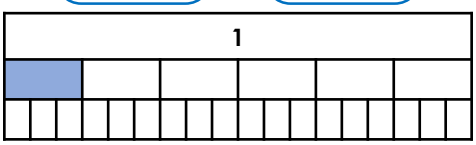


D

VF
HW/Ext

2. Choose from the digit cards below to complete the number sentence.

$\frac{1}{5}$ $\frac{1}{6}$ $\frac{1}{18}$ $\frac{1}{12}$



$\frac{\square}{\square} \div 3 = \frac{\square}{\square}$

D

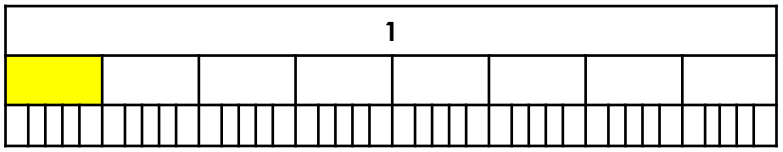
VF
HW/Ext

3. Kyle and Sapphire are dividing fractions.

$\frac{1}{8} \div 5 =$

Kyle: I think the answer is $\frac{1}{40}$

Sapphire: I think the answer is $\frac{1}{45}$



Who is correct?
Draw models to help you explain how you know.

D

RPS
HW/Ext

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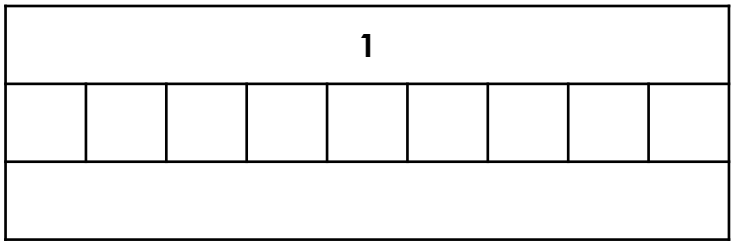
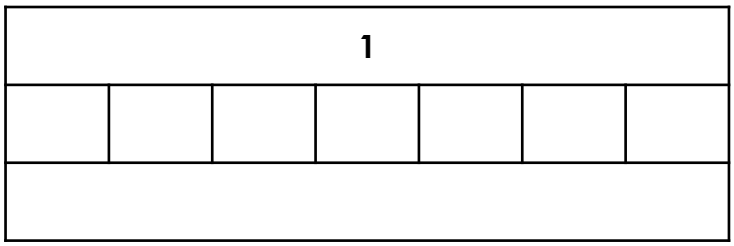
Divide Fractions by Integers 2

4. Complete the number sentences and fill in the bar models.

A. $\frac{5}{9} \div 3 = \frac{\square}{\square}$



B. $\frac{3}{7} \div 4 = \frac{\square}{\square}$

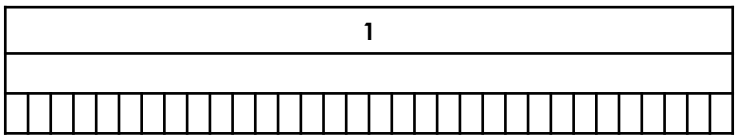


E

VF
HW/Ext

5. Choose from the digit cards below to complete the number sentence.

$\frac{4}{6}$ $\frac{5}{8}$ $\frac{4}{24}$ $\frac{5}{24}$



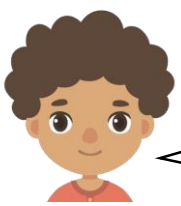
$\frac{\square}{\square} \div 3 = \frac{\square}{\square}$

E

VF
HW/Ext

6. Yumnah and Dawood are dividing fractions.

$\frac{5}{7} \div 4 =$



Dawood: I think the answer is $\frac{5}{21}$

Yumnah: I think the answer is $\frac{5}{28}$

Yumnah

Who is correct?
Draw models to help you explain how you know.

E

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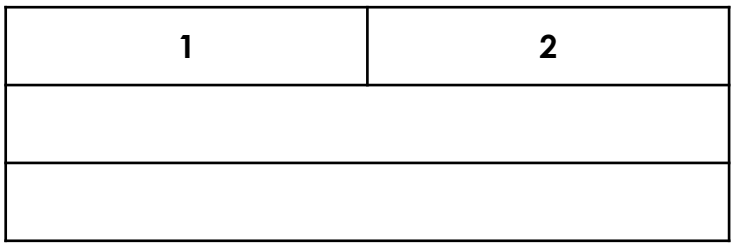
Divide Fractions by Integers 2

7. Complete the number sentences and fill in the bar models.

A. $\frac{11}{9} \div 2 = \frac{\square}{\square}$

B. $\frac{14}{8} \div 3 = \frac{\square}{\square}$



GD

VF
HW/Ext

8. Choose from the digit cards below to complete the number sentence.

$\frac{16}{56}$ $3\frac{1}{8}$ $\frac{25}{56}$ $4\frac{2}{8}$

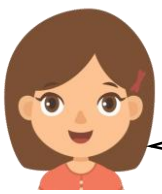
$\square\frac{\square}{\square} \div 7 = \frac{\square}{\square}$

GD

VF
HW/Ext

9. Cara and Jack are dividing fractions.

$2\frac{5}{6} \div 4 =$



Cara: I think the answer is $\frac{17}{24}$

Jack: I think the answer is $\frac{20}{24}$

Who is correct?
Draw models to help you explain how you know.

GD

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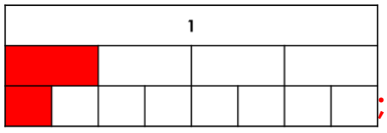
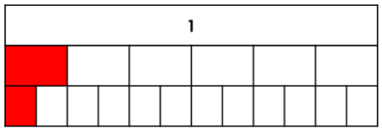
Homework/Extension
Divide Fractions by Integers 2

Developing

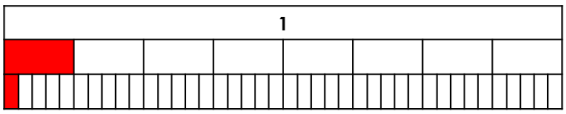
1. A = $\frac{1}{4} \div 2 = \frac{1}{8}$ 

; B = $\frac{1}{6} \div 2 = \frac{1}{12}$ 

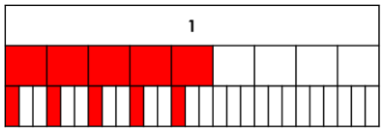
2. $\frac{1}{6} \div 3 = \frac{1}{18}$

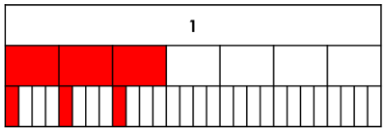
3. Kyle is correct because $\frac{1}{8} \div 5 = \frac{1}{40}$.

Accept any representation that accurately shows $\frac{1}{8} \div 5 = \frac{1}{40}$, for example:



Expected

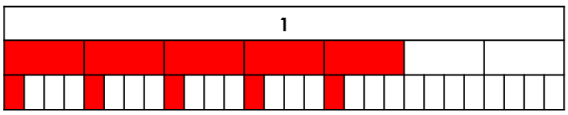
4. A = $\frac{5}{9} \div 3 = \frac{5}{27}$ 

; B = $\frac{3}{7} \div 4 = \frac{3}{28}$ 

5. $\frac{5}{8} \div 3 = \frac{5}{24}$

6. Yumnah is correct because $\frac{5}{7} \div 4 = \frac{5}{28}$.

Accept any representation that accurately shows $\frac{5}{7} \div 4 = \frac{5}{28}$, for example:



Greater Depth

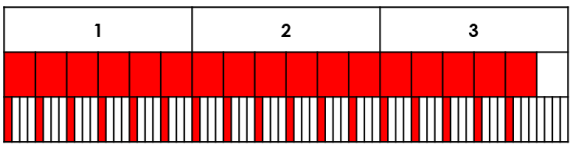
7. A = $\frac{11}{9} \div 2 = \frac{11}{18}$ 

; B = $\frac{14}{8} \div 3 = \frac{14}{24}$ 

8. $3\frac{1}{8} \div 7 = \frac{25}{56}$

9. Cara is correct because $2\frac{5}{6} \div 4 = \frac{17}{24}$.

Accept any representation that accurately shows $2\frac{5}{6} \div 4 = \frac{17}{24}$, for example:



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