# Homework/Extension Step 12: Divide Fractions by Integers 1

## **National Curriculum Objectives:**

Mathematics Year 6: (6F2) <u>Use common factors to simplify fractions; use common multiples to express fractions in the same denomination</u>

Mathematics Year 6: (6F5b) Divide proper fractions by whole numbers [for example, 1/3  $\div 2 = 1/61$ 

#### **Differentiation:**

Questions 1, 4 and 7 (Varied Fluency)

Developing Compare two calculations using comparison symbols when dividing fractions by integers. Includes pictorial support and calculations where the numerator is the first or second multiple of the divisor.

Expected Compare two calculations using comparison symbols when dividing fractions by integers. Includes calculations where the numerator is up to the fifth multiple of the divisor.

Greater Depth Compare two calculations using comparison symbols when dividing fractions by integers. Includes mixed numbers and improper fractions, and calculations where the numerator is up to the tenth multiple of the divisor

#### Questions 2, 5 and 8 (Varied Fluency)

Developing Complete the division number sentence using the digit cards. Includes division of fractions by integers where the numerator is the first or second multiple of the divisor. Expected Complete the division number sentence using the digit cards. Includes division of fractions by integers where the numerator is up to the fifth multiple of the divisor. Greater Depth Complete the division number sentence using the digit cards. Includes division of fractions by integers where the numerator is up to the tenth multiple of the divisor and some improper fractions are used.

#### Questions 3, 6 and 9 (Reasoning and Problem Solving)

Developing Use the inverse to find the starting number in the problem. Includes pictorial support and calculations where the numerator is the first or second multiple of the divisor.

Expected Use the inverse to find the starting number in the problem. Includes unshaded pictorial support and calculations where the numerator is up to the fifth multiple of the divisor.

Greater Depth Use the inverse to find the starting number in the problem. Includes mixed numbers and improper fractions, and calculations where the numerator is up to the tenth multiple of the divisor

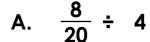
More Year 6 Fractions resources.

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



# **Divide Fractions by Integers 1**

1. Solve the calculations and then add a comparison symbol to make the statements correct.





$$\frac{3}{20} \div 3$$



B. 
$$\frac{8}{24} \div 8$$

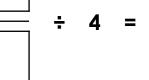


$$\frac{6}{24} \div 6$$



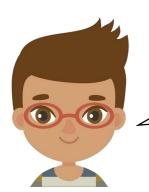
HW/Ext

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





3. Ocean is multiplying fractions.



I multiply my starting fraction by 2.

My answer is  $\frac{4}{5}$ .

What was my starting fraction?

Using your knowledge of dividing fractions, find the answer. Prove it.



HW/Ext

# **Divide Fractions by Integers 1**

4. Solve the calculations and then add a comparison symbol to make the statements correct.

A. 
$$\frac{16}{25} \div 4$$

$$\frac{15}{25} \div 3$$

B. 
$$\frac{15}{30} \div 3$$

$$\frac{24}{30} \div 8$$



VF HW/Ext

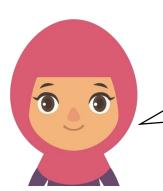
5. Choose from the digit cards below to complete the number sentence.





VF HW/Ext

6. Daya is multiplying fractions.



I multiply my starting fraction by 3.

My answer is  $\frac{12}{15}$ .

What was my starting fraction?

	I						

Using your knowledge of dividing fractions, find the answer. Prove it.



HW/Ext

# **Divide Fractions by Integers 1**

7. Solve the calculations and then add a comparison symbol to make the statements correct.

A. 
$$\frac{45}{20} \div 5$$

$$\frac{48}{20} \div 6$$

B. 
$$1\frac{5}{15} \div 10$$

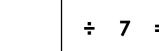
$$2\frac{10}{15} \div 10$$



HW/Ext

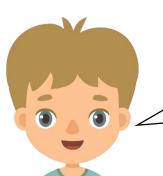
8. Choose from the digit cards below to complete the number sentence.

$$1\frac{9}{56}$$





9. Harley is multiplying fractions.



I multiply my starting fraction by 8.

My answer is  $6\frac{6}{7}$ .

What was my starting fraction?

Using your knowledge of dividing fractions, find the answer. Prove it.



HW/Ext

# <u>Homework/Extension</u> Divide Fractions by Integers 1

## **Developing**

$$2.\frac{4}{15} \div 4 = \frac{1}{15}$$

3. The starting fraction was  $\frac{2}{5}$ . You need to use the inverse and complete  $\frac{4}{5} \div 2$ .

### **Expected**

$$5.\frac{20}{28} \div 4 = \frac{5}{28}$$

6. The starting fraction was  $\frac{4}{15}$ . You need to use the inverse and complete  $\frac{12}{15} \div 3$ .

### **Greater Depth**

$$8.\frac{63}{8} \div 7 = 1\frac{1}{8}$$

9. The starting fraction was  $\frac{6}{7}$ . You need to use the inverse and complete  $6\frac{6}{7} \div 8$ .