

# Homework/Extension

## Step 16: Finding the Whole

### National Curriculum Objectives:

Mathematics Year 6: (6F6) [Associate a fraction with division and calculate decimal fraction equivalents \[for example, 0.375\] for a simple fraction \[for example, 3/8\]](#)

Mathematics Year 6: (6F11) [Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts](#)

### Differentiation:

Questions 1, 4 and 7 (Varied Fluency)

**Developing** Identify the correct statements. Includes one unit fraction per calculation (using thirds, quarters and tenths). Question includes pictorial support.

**Expected** Identify the correct statements. Includes one fraction per calculation (up to twelfths). Question includes pictorial support.

**Greater Depth** Identify the correct statements. Includes two fractions per calculation with different denominators (up to twelfths).

Questions 2, 5 and 8 (Varied Fluency)

**Developing** Identify the correct representation of a given amount. Includes one unit fraction per calculation (using thirds, quarters and fifths). Question includes pictorial support.

**Expected** Identify the correct representation of a given amount. Includes one fraction per calculation (up to twelfths). Question includes pictorial support.

**Greater Depth** Identify the correct representation of a given amount. Includes two fractions per calculation with different denominators (up to twelfths).

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

**Developing** Identify and explain which statement is correct. Includes one unit fraction per calculation (using thirds). Question includes pictorial support.

**Expected** Identify and explain which statement is correct. Includes one fraction per calculation (up to twelfths).

**Greater Depth** Identify and explain which statement is correct. Includes two fractions per calculation with different denominators (up to twelfths).

More [Year 6 Fractions](#) resources.

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

# Finding the Whole

1. Circle the correct statements.

A. 

500									
55									

 $\frac{1}{10}$  of 500 is 55

B. 

390		
130		

 $\frac{1}{3}$  of 390 is 130

C. 

208			
52			

 $\frac{1}{4}$  of 208 is 52



VF  
HW/Ext

2. Tick the representation where the whole equals 230.

A. 

56			

  
 $\frac{1}{4}$  of  is 56

B. 

76		

  
 $\frac{1}{3}$  of  is 76

C. 

46				

  
 $\frac{1}{5}$  of  is 46



VF  
HW/Ext

3. John has spilt some juice on his homework on the way to school. The juice has covered the whole amount and he cannot remember what it is.



John and Louise are discussing what the missing number could be.



John

I think the missing number is 125

I think the missing number is 135



Louise

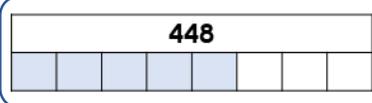
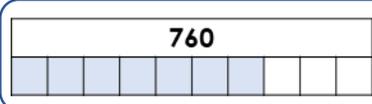
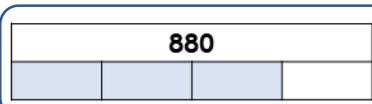
Who is correct? Convince me.



RPS  
HW/Ext

# Finding the Whole

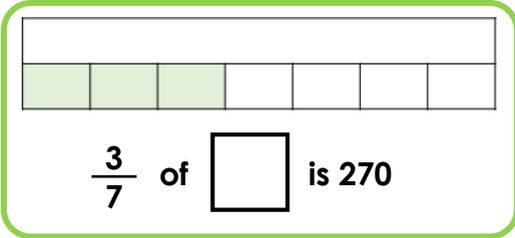
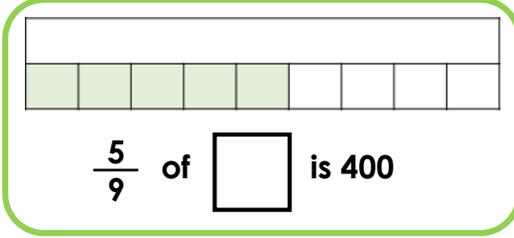
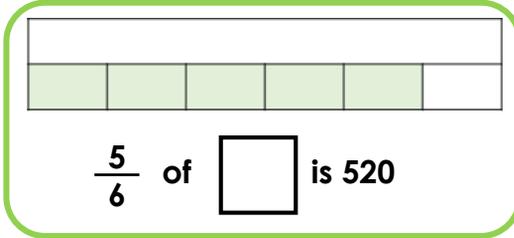
4. Circle the correct statements.

- A.   $\frac{5}{8}$  of 448 is 280
- B.   $\frac{7}{10}$  of 760 is 525
- C.   $\frac{3}{4}$  of 880 is 660



VF  
HW/Ext

5. Tick the representation where the whole equals 630.

- A.   $\frac{3}{7}$  of  is 270
- B.   $\frac{5}{9}$  of  is 400
- C.   $\frac{5}{6}$  of  is 520



VF  
HW/Ext

6. Alice has spilt some milkshake whilst doing her homework. The milkshake has covered the whole amount and she cannot remember what it is.

$$\frac{7}{12} \text{ of } \img alt="Red splat representing a milkshake spill." data-bbox="445 688 528 745"/> \text{ is } 427$$

Alice and Jack are discussing what the missing number could be.



Alice

I think the missing number is 723

I think the missing number is 732



Jack

Who is correct? Convince me.



RPS  
HW/Ext

## Finding the Whole

7. Circle the correct statements.

A.  $\frac{1}{4} + \frac{3}{10}$  of 400 is 220

B.  $\frac{2}{7} + \frac{4}{8}$  of 560 is 440

C.  $\frac{3}{12} + \frac{1}{5}$  of 345 is 135



VF  
HW/Ext

8. Tick the calculation where the whole equals 420.

A.  $\frac{2}{5} + \frac{1}{4}$  of  is 117

B.  $\frac{1}{3} + \frac{1}{2}$  of  is 300

C.  $\frac{3}{7} + \frac{2}{10}$  of  is 264



VF  
HW/Ext

9. Robert's pen has leaked on his work. The ink has covered the whole amount and he cannot remember what it is.

$$\frac{1}{4} + \frac{3}{9} \text{ of } \text{[ink blot]} \text{ is } 168$$

Robert and Elsie are discussing what the missing number could be.



Robert

I think the missing number is 288

I think the missing number is 298



Elsie

Who is correct? Convince me.



RPS  
HW/Ext

## Homework/Extension Finding the Whole

### Developing

1. **B and C**
2. **C**
3. **Louise is correct because  $135 \div 3 = 45$ . This means  $\frac{1}{3}$  of  $135 = 45$ .**

### Expected

4. **A and C**
5. **A**
6. **Jack is correct because  $427 \div 7 = 61$  and  $61 \times 12 = 732$  therefore,  $\frac{7}{12}$  of  $732 = 427$ .**

### Greater Depth

7. **A and B**
8. **C**
9. **Robert is correct because  $\frac{1}{4} + \frac{3}{9} = \frac{7}{12}$  ;  $168 \div 7 = 24$ ;  $24 \times 12 = 288$  therefore,  $\frac{1}{4} + \frac{3}{9}$  of  $288 = 168$ .**