4 MySummary

Check out

You should now be able to ...

Test it

Questions

✓ Add and subtract fractions with the same denominator.	5	1
✓ Add and subtract fractions with different denominators.	6	2
✓ Find a fraction of a quantity.	5	3, 4
✓ Multiply and divide integers by fractions.	6	5, 6
✓ Convert fractions to decimals and compare them.	5	7, 8
✓ Find a percentage of a quantity and a percentage change.	5	9 – 12
✓ Write one number as a percentage of another.	5	13
✓ Calculate percentage changes.	7	14, 15

Language	Meaning	Example
Denominator	This is the bottom number of a fraction. It tells you how many equal parts are in the whole.	The denominator for $\frac{5}{8}$ is 8. This means the whole is split into 8 equal parts.
Numerator	This is the top number of a fraction. It tells you how many parts you have.	The numerator for $\frac{5}{8}$ is 5. This means you have 5 out of the 8 parts.
Integer	An integer is zero or any positive or negative whole number.	... -3, -2, -1, 0, 1, 2, 3, 4 ...
Recurring decimal	A recurring decimal has an unlimited number of digits, which form a pattern, after the decimal point.	$\frac{2}{3} = 2 \div 3 = 0.666666...$, the sixes do not stop.
Percentage	Percent means out of 100.	47% means $\frac{47}{100}$
Equivalent decimal	The decimal number that equals a given percentage.	The decimal equivalent of 17.5% is 0.175
Decimal multiplier	The number you multiply by to calculate a percentage change.	To increase by 25% multiply by 1.25 To decrease by 27% multiply by 0.75

4 MyReview

1 Calculate these and simplify your answer where possible.

a $\frac{3}{7} - \frac{1}{7}$ **b** $\frac{2}{11} + \frac{4}{11} + \frac{5}{11}$

2 Calculate these and simplify your answer where possible.

a $\frac{1}{3} + \frac{1}{6}$ **b** $\frac{1}{4} - \frac{1}{20}$ **c** $\frac{2}{3} + \frac{1}{4}$

3 Use a mental method to calculate.

a $\frac{1}{5}$ of £30 **b** $\frac{1}{8}$ of 24 students

4 Use a mental or written method to calculate.

a $\frac{2}{5}$ of 40 g **b** $\frac{3}{7}$ of 35 cm

5 Work these out, writing your answers as whole numbers.

a $18 \times \frac{1}{6}$ **b** $\frac{1}{4} \times 60$

6 Divide these whole numbers by fractions.

a $50 \div \frac{1}{3}$ **b** $1 \div \frac{1}{5}$

7 Convert these fractions into decimals without using a calculator.

a $\frac{3}{10}$ **b** $\frac{2}{5}$ **c** $\frac{1}{4}$

8 Use a calculator to convert these fractions into decimals. Round your answers to 2 dp.

a $\frac{1}{6}$ **b** $\frac{4}{9}$

9 Calculate these percentages of quantities using a mental method.

a 10% of 70 **b** 60% of 120

10 Calculate.

a 75% of 280 **b** 3% of 500

11 Increase £76 by 25%.

12 A toaster originally cost £18 but it reduced by 10%, what is the new price?

13 In a class of 25 students, 15 are boys. What percentage are girls?

14 Use a decimal multiplier to

a increase £300 by 7%

b decrease £231 by 19%.

15 You invest £740 in a savings account which pays 4% interest. How much money do you have after

a 1 year **b** 2 years **c** 10 years.

What next?

Score	
0 – 5	Your knowledge of this topic is still developing. To improve look at Formative test: 3A-4; MyMaths: 1016, 1017, 1018, 1030, 1031, 1042, 1045, 1060, 1073, 1075 and 1302
6 – 12	You are gaining a secure knowledge of this topic. To improve look at InvisiPen: 141, 142, 145, 151, 152, 161 and 162
13 – 15	You have mastered this topic. Well done, you are ready to progress!