

Test Revision



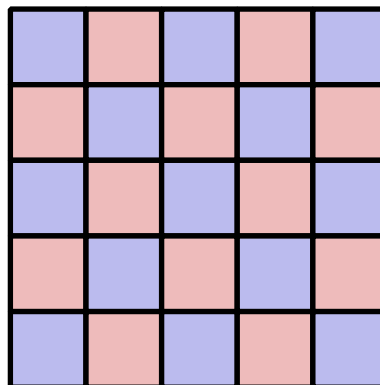
**To show how good you are at fractions ...
... only do half your homework.**

8.1 The Revision

Marks available : 50

Question 1

A slice of Battenberg cake is made of 25 equally sized square pieces, alternatively coloured lilac and pink, as shown.



Freddie says that if he eats all the lilac squares and George eats all the pink they will have eaten half of the slice each.

Is Freddie correct ?

Explain your answer.

[3 marks]

Question 2

(i) List the first six multiples of 6

[1 mark]

(ii) List the first six multiples of 9

[1 mark]

(iii) What is $lcm\{6,9\}$?

[1 mark]

(iv) Showing all the steps, work out $\frac{1}{6} + \frac{4}{9}$

[7 marks]

Question 3

Write the following top heavy fractions as mixed number fractions.

(i) $\frac{8}{3}$

(ii) $\frac{57}{5}$

(iii) $\frac{85}{7}$

(iv) $\frac{513}{4}$

[8 marks]

Question 4

(i) Without using bus stop division explain why 5 is not a factor of 154

[2 marks]

(ii) As 5 is not a factor of 154, list some related numbers also not factors.

[2 marks]

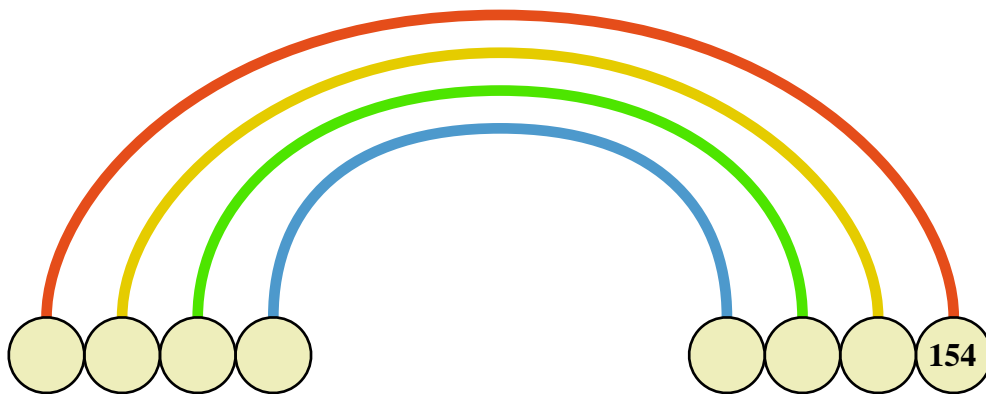
(iii) Without using bus stop division explain why 3 is not a factor of 154

[2 marks]

(iv) As 3 is not a factor of 154, list some related numbers also not factors.

[2 marks]

(v) Complete the factor rainbow for 154



[3 marks]

(v) Write in a list, all the factors of 154

[1 mark]

Question 5

(a) Use the cherry picking method to write as products of primes.

(i) 693

(ii) 945

[3, 3 marks]

(b) Hence simplify $\frac{693}{945}$

[3 marks]

Question 6

Write the following mixed number fractions as top heavy fractions.

(i) $5\frac{2}{7}$

(ii) $11\frac{3}{4}$

(iii) $53\frac{5}{7}$

(iv) $241\frac{1}{3}$

[8 marks]



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In October 2020, Shrewsbury School was voted "**Independent School of the Year 2020**"

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Teachers may obtain detailed worked solutions to the exercises by email from mhh@shrewsbury.org.uk