

# GCSE Mathematics

**F**

## HCF & LCM Practice

Foundation, Grade 4-5

| Total Marks | Time   | Questions |
|-------------|--------|-----------|
| 44          | 44 min | 20        |

**Instructions:**

- Do not use a calculator when you see: 
- Answer all questions in the spaces provided.
- Show all your working - marks are awarded for method as well as final answers.
- Cross through any work you do not want to be marked.
- Check your answers if you have time at the end.

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**Edexcel-style questions****Q1** 

Grade 4

Edexcel style

Find the highest common factor (HCF) of 24 and 36.

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Answer 

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teachably

**[2 marks]****Q2** 

Grade 4

Edexcel style

Find the lowest common multiple (LCM) of 4 and 6.

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Answer 

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teachably

**[2 marks]**

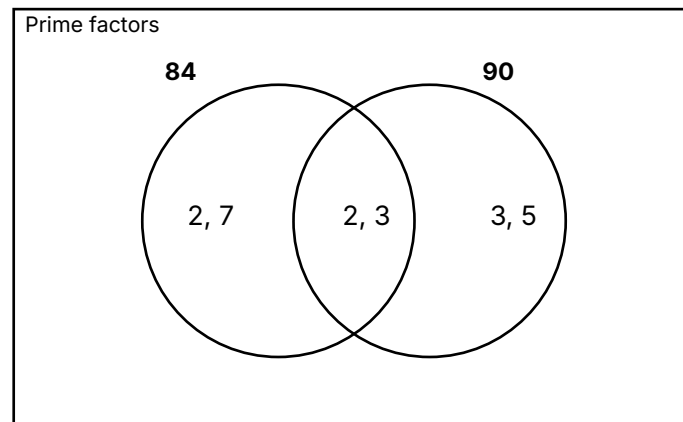
**Q3** 

Grade 5

Edexcel style

The Venn diagram shows the prime factors of 84 and 90.

(a) Use the Venn diagram to find the HCF of 84 and 90.

**[1 mark]**

Answer \_\_\_\_\_

(b) Use the Venn diagram to find the LCM of 84 and 90.

**[2 marks]**

Answer \_\_\_\_\_

teachably

**[3 marks]****Q4** 

Grade 5

Edexcel style

Two bells ring every 8 seconds and every 12 seconds. Both bells ring together at time 0.  
After how many seconds will they next ring together?

Answer \_\_\_\_\_

teachably

**[2 marks]**

**Q5** 

Grade 5

Edexcel style

A shop has 48 pens and 60 pencils. They are to be packed into identical bags, with no pens or pencils left over. What is the greatest number of bags that can be made?

Answer \_\_\_\_\_

teachably

**[2 marks]**

**AQA-style questions****Q6** 

Grade 4

AQA style

Find the highest common factor (HCF) of 18 and 24.

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Answer 

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teachably

**[2 marks]****Q7** 

Grade 4

AQA style

Find the lowest common multiple (LCM) of 6 and 8.

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Answer 

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teachably

**[2 marks]**

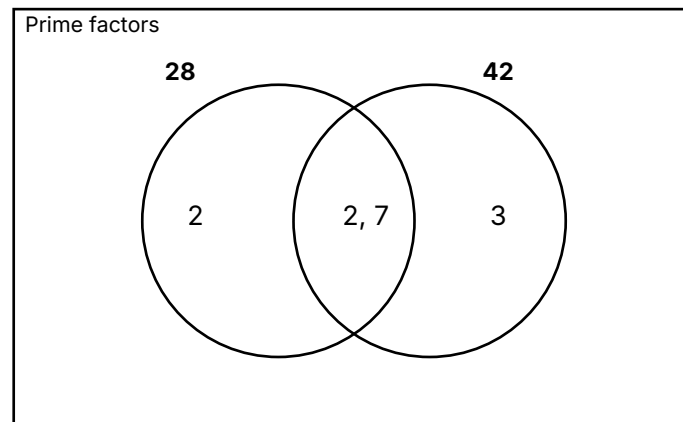
**Q8** 

Grade 5

AQA style

The Venn diagram shows the prime factors of 28 and 42.

(a) Use the Venn diagram to find the HCF of 28 and 42.

**[1 mark]**

Answer \_\_\_\_\_

(b) Use the Venn diagram to find the LCM of 28 and 42.

**[2 marks]**

Answer \_\_\_\_\_

teachably

**[3 marks]****Q9** 

Grade 5

AQA style

Two lighthouses flash every 15 seconds and every 20 seconds. Both flash together at time 0. After how many seconds will they next flash together?

Answer \_\_\_\_\_

teachably

**[2 marks]**

**Q10** 

Grade 5

AQA style

A baker has 36 cupcakes and 84 cookies. They are to be arranged into identical trays, with no cupcakes or cookies left over. What is the greatest number of trays that can be used?

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Answer 

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teachably

**[2 marks]**

**OCR-style questions****Q11** 

Grade 4

OCR style

Find the highest common factor (HCF) of 30 and 45.

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Answer 

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teachably

**[2 marks]****Q12** 

Grade 4

OCR style

Find the lowest common multiple (LCM) of 4 and 10.

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Answer 

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teachably

**[2 marks]**

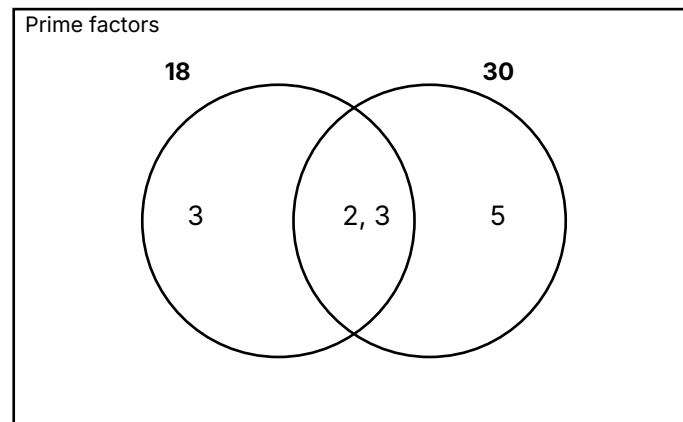
**Q13** 

Grade 5

OCR style

The Venn diagram shows the prime factors of 18 and 30.

(a) Use the Venn diagram to find the HCF of 18 and 30.

**[1 mark]**

Answer \_\_\_\_\_

(b) Use the Venn diagram to find the LCM of 18 and 30.

**[2 marks]**

Answer \_\_\_\_\_

teachably

**[3 marks]****Q14** 

Grade 5

OCR style

Bus A leaves the station every 18 minutes. Bus B leaves the station every 24 minutes. Both buses leave together at 9:00 am.

After how many minutes will they next leave together?

Answer \_\_\_\_\_

teachably

**[2 marks]**

**Q15** 

Grade 5

OCR style

A gardener has 42 tulip bulbs and 56 daffodil bulbs. They are to be planted in identical rows, with no bulbs left over. What is the greatest number of rows that can be planted?

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Answer 

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teachably

**[2 marks]**

**Teachably-style questions****Q16** 

Grade 4

Teachably style

Find the highest common factor (HCF) of 20 and 28.

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Answer 

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teachably

**[2 marks]****Q17** 

Grade 4

Teachably style

Find the lowest common multiple (LCM) of 6 and 9.

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Answer 

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teachably

**[2 marks]**

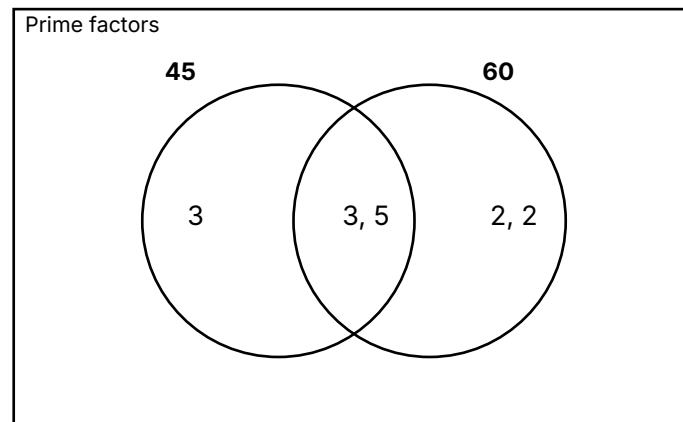
**Q18** 

Grade 5

Teachably style

The Venn diagram shows the prime factors of 45 and 60.

(a) Use the Venn diagram to find the HCF of 45 and 60.

**[1 mark]**

Answer \_\_\_\_\_

(b) Use the Venn diagram to find the LCM of 45 and 60.

**[2 marks]**

Answer \_\_\_\_\_

teachably

**[3 marks]****Q19** 

Grade 5

Teachably style

Two traffic lights change to green every 10 seconds and every 14 seconds. Both lights turn green together at time 0.

After how many seconds will they next turn green together?

Answer \_\_\_\_\_

teachably

**[2 marks]**

**Q20** 

Grade 5

Teachably style

A teacher has 54 red counters and 72 blue counters. They are to be shared into identical groups, with no counters left over. What is the greatest number of groups that can be made?

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Answer 

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teachably

[2 marks]

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