

GCSE Maths Factors, Multiples and Primes (Foundation): check-up and exam-style questions: worksheet

GCSE Maths - Factors, Multiples and Primes - Foundation - Test yourself

Name: _____

Date: _____

Score: _____

22 questions. Write your answers in the spaces. Answers and step-by-step help are free at websink.site/gcse/maths/ch02-factors-multiples-primes-powers/foundation/check-up-and-exam-style-questions/

Exercise 2Z Check-up (non-calculator)

Non-calculator

- 1 List all the factors of 28.

Answer: _____

- 2 Is 87 a prime number? Give a reason.

Answer: _____

- 3 Write 90 as a product of its prime factors. Give your answer in index form.

Answer: _____

- 4 Work out the HCF of 18 and 30.

Answer: _____

- 5 Work out the LCM of 8 and 12.

Answer: _____

- 6 Work out $\sqrt{169}$.

Answer: _____

- 7 Work out 5^3 .

Answer: _____

- 8 Write $2^6 \times 2^3$ as a single power of 2.

Answer: _____

- 9 Work out 4^{-2} . Give your answer as a fraction.

Answer: _____

- 10 Write down the two consecutive whole numbers between which $\sqrt{60}$ lies.

Answer: _____

Exercise 2X Exam-style questions

Non-calculator

- 1 Write 60 as a product of its prime factors.

[3 marks]

Answer: _____

- 2 Write down all the factors of 20.

[2 marks]

Answer: _____

- 3 Find the lowest common multiple (LCM) of 12 and 15.

[2 marks]

Answer:

- 4** Find the highest common factor (HCF) and the lowest common multiple (LCM) of 36 and 48. [4 marks]

Answer:

- 5** Work out the value of each of these. [2 marks]

(a) $\sqrt{81}$

Answer:

(b) 2^5

Answer:

- 6** Work out $\sqrt{6^2 + 8^2}$. [2 marks]

Answer:

- 7** Write each of these as a single power of 5 or 7. [2 marks]

(a) $5^4 \times 5^3$

Answer:

(b) $7^8 \div 7^5$

Answer:

- 8** Work out the value of 2^{-3} . Give your answer as a fraction. [2 marks]

Answer:

- 9** Write down the two consecutive whole numbers between which $\sqrt{70}$ lies. [2 marks]

Answer:

- 10** Daisy has three cards with the digits 3, 5 and 8. She uses all three cards to make a three-digit number. (a) List all the three-digit numbers she can make. (b) How many of them are even? [3 marks]

(a) (a)

Answer:

(b) (b)

Answer:

- 11** A bell rings every 12 minutes and a second bell rings every 15 minutes. Both bells ring together at 10:00 am. At what time do they next ring together? [3 marks]

Answer:

- 12** Write 168 and 252 as products of prime factors. Hence find the HCF of 168 and 252. [4 marks]

Answer: