

Year 5 Prime Numbers, Factors, Squares and Cubes: check-up and SATs-style questions: answers

Year 5 - Prime Numbers, Factors, Squares and Cubes - Test yourself

Answers. Final answers to the worksheet questions. Full step-by-step solutions for every question are free at websink.site/ks2-sats/maths/year-5/ch03-factors-primes-squares-cubes/check-up-and-sats-style-questions/

Exercise 3Z Check-up (non-calculator) Non-calculator

- 1 Write the first five multiples of 9.

Answer: 9, 18, 27, 36, 45

- 2 Find the lowest common multiple (LCM) of 6 and 10.

Answer: 30

- 3 Is 3,456 divisible by 8? Write Yes or No.

Answer: Yes

- 4 Write all the factors of 40.

Answer: 1, 2, 4, 5, 8, 10, 20, 40

- 5 Find the highest common factor (HCF) of 24 and 40.

Answer: 8

- 6 Is 83 a prime number? Write Prime or Not prime.

Answer: Prime

- 7 Write 56 as a product of prime factors.

Answer: $2 \times 2 \times 2 \times 7$

- 8 Work out $8^2 + 3^3$.

Answer: 91

- 9 Find the missing number. $\boxed{?}^3 = 216$

Answer: 6

- 10 I am a multiple of 8. I am a multiple of 3. I am between 60 and 80. What number am I?

Answer: 72

Exercise 3X SATs-style questions Non-calculator

- 1 Which number is a multiple of both 4 and 6? Tick one box. A 16 B 18 C 24 D 28

[1 mark]

Answer: C (24)

- 2 Circle the prime number. 21 27 29 33

[1 mark]

Answer: 29

3 What is the value of 6^3 ? [1 mark]

Answer: 216

4 Which number is divisible by 9? Tick one box. A 4,321 B 5,076 C 6,125 D 7,890 [1 mark]

Answer: B (5,076)

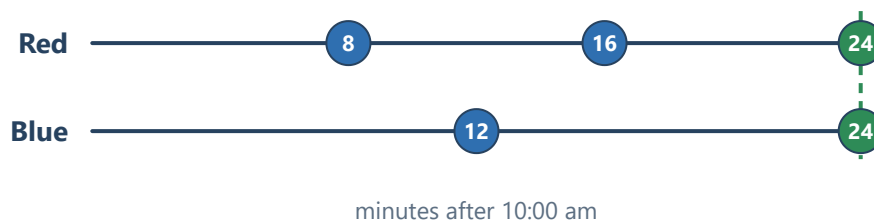
5 Jack says, "77 is a prime number." Show that Jack is wrong. [2 marks]

Answer: $77 = 7 \times 11$, so it has more than two factors.

6 Write all the factors of 28. [2 marks]

Answer: 1, 2, 4, 7, 14, 28

7 The red bus leaves the station every 8 minutes. The blue bus leaves every 12 minutes. Both buses leave at 10:00 am. At what time do they next leave together? Show your working. [2 marks]



Answer: 10:24 am

8 Write 72 as a product of prime factors. Draw a factor tree to help you. [2 marks]

Answer: $2 \times 2 \times 2 \times 3 \times 3$

9 Tara has 24 red beads and 36 blue beads. She makes necklaces that are all the same. She uses every bead.

(a) What is the greatest number of necklaces she can make? (2 marks) [3 marks]

Answer: 12

(b) How many red beads and how many blue beads are on each necklace? (1 mark)

Answer: 2 red beads and 3 blue beads

10 Dev thinks of a number. It is a square number. It is also a cube number. It is more than 1 and less than 100. What is Dev's number? Show how you know. [3 marks]

Answer: 64