

KS3 – Factors, Multiples & Primes – Answers

Section A – Factors & Multiples

Q1

- a) 1, 2, 3, 4, 6, 12
- b) 1, 2, 4, 5, 10, 20
- c) 1, 2, 3, 5, 6, 10, 15, 30

Q2

- a) 4, 8, 12, 16, 20
- b) 7, 14, 21, 28, 35
- c) 12, 24, 36, 48, 60

Q3

2, 3, 4, 6, 8, 12, 16, 24

Q4

Example answers:

- a) 5
- b) 45
- c) 12

Other correct answers are acceptable.

Q5

1, 2, 3, 6

Q6

48

Section B – Prime Numbers

Q7

7, 11, 17, 23

Q8

23, 29, 31, 37

Q9

- a) Prime
- b) Not prime
- c) Prime

Q10

- a) 2
- b) 2

Q11

Example answers:

- a) $7 + 13 = 20$
- b) $17 + 17 = 34$

Other correct pairs of prime numbers are acceptable.

Q12

13 and 23

Section C – LCM & HCF

Q13

- a) 12
- b) 40

Q14

- a) 6
- b) 12

Q15

- a) 24
- b) 60

Q16

- a) 14
- b) 15

Q17

- a) 24
- b) 12

Q18

24 seconds

Q19

12 packs

Q20

10:12 am

Section D – Prime Factors

Q21

- a) $2 \times 2 \times 2 \times 3$
- b) $2 \times 2 \times 2 \times 5$
- c) $2 \times 3 \times 3 \times 3$

Q22

a) $2^2 \times 3 \times 5$

b) $2^3 \times 3^2$

c) $2 \times 3 \times 5^2$

Q23

a) 7

b) 3^2

Q24

72

Q25

300

Q26

60

Q27

252