HCF and LCM

1.   Find the LCM of 3 and 8

24

(2 marks)

2.   Find the LCM of 4 and 11

44

(2 marks)

3.   Find the LCM of 20 and 15

60

(2 marks)

4.   Find the LCM of 12 and 18

36

(2 marks)

HCF and LCM

5.   Find the HCF of 12 and 16

                            4

                                              (2 marks)

6.   Find the HCF of 20 and 35

                              5

                                              (2 marks)

7.   Find the HCF of 30 and 48

                              6

                                              (2 marks)

8.   What is the HCF of 35 and 42?

                              7

                                              (2 marks)

HCF and LCM

9. Below is a list of numbers

    2, 6, 8, 10, 12, 15, 19, 20, 24, 28, 30, 32, 40

    a) Write down all the factors of 12 from the list
    2, 6, 12

    b) Write down all the multiples of 10 from the list

    10, 20, 30, 40

    c) Write down the LCM of 8 and 12 from the list

    24

    (5 marks)

10. A blue light flashes every 10 seconds.
    A red light flashes every 8 seconds.
    They both flash at the same time.
    After how many seconds will they both flash at the
    same time?

    Blue: 10, 20, 30, 40, 50, 60, 70, 80, ...
    Red: 8, 16, 24, 32, 40, 48, 56, 64, 72, ...

    40 seconds

    (2 marks)

11. Trains leave Newcastle to Durham every 12 minutes.
Trains leave Newcastle to Carlisle every 20 minutes.
They both leave Newcastle at 11am.
When do they both leave Newcastle at the same time?

Durham: 12, 24, 36, 48, 60, 72, 84, 96, 108, …
Carlisle: 20, 40, 60, 80, 100, …

60 minutes so 12pm

(3 marks)

12. Jesse is buying burgers and buns for a party.
Burgers are sold in packs of 4.
Buns are sold in packs of 6.
She wants to buy the exact same number of burgers and buns.
She has more than 20 guests coming to her party.
What is the minimum number of packets of buns she should buy?

Burgers: 4, 8, 12, 16, 20, 24, 28, 32, 26, 40, …
Buns: 6, 12, 18, 24, 30, 36, 42, 48, 54, 60, …

24 Burgers and buns
4 packets of buns

(4 marks)

HCF and LCM

13. Lighthouse A flashes every 8 minutes.
Lighthouse B flashes every 12 minutes.
Lighthouse C flashes every 10 minutes.
They all flash at the same time at 11:15 pm
When do they next all flash at the same time?

A: 8, 16, 24, 32, 40, 48, 56, 64, 72, 80, 88, 96, 104, 112, 120, …

B: 12, 24, 36, 48, 60, 72, 84, 96, 108, 120, ….

C: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, …

120 minutes (2 hours) 1:15am

(5 marks)

14. The HCF of two numbers is 8.
The LCM of the two numbers is 24.
What are the two numbers?

8 and 24

(2 marks)