# LCM/HCF/PrimeFactors

Solve All the following Questions

1    Buses to Acton leave a bus station every 24 minutes.
     Buses to Barton leave the same bus station every 20 minutes.

     A bus to Acton and a bus to Barton both leave the bus station at 9 00 am.

     When will a bus to Acton and a bus to Barton next leave the bus station at the same time?

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**(Total 3 marks)**

2        Write 525 as a product of its prime factors.

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**(Total 3 marks)**

3    Matt and Dan cycle around a cycle track.

Each lap Matt cycles takes him 50 seconds.
Each lap Dan cycles takes him 80 seconds.

Dan and Matt start cycling at the same time at the start line.

Work out how many laps they will each have cycled when they are next at the start line together.

Matt ............................laps

Dan ............................laps

**(Total 3 marks)**

4    Trams leave Piccadilly

to Eccles every 9 minutes

to Didsbury every 12 minutes

A tram to Eccles and a tram to Didsbury both leave Piccadilly at 9 am.

At what time will a tram to Eccles and a tram to Didsbury next leave Piccadilly at the same time?

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**(Total 3 marks)**

5   Rita is going to make some cheeseburgers for a party.
    She buys some packets of cheese slices and some boxes of burgers.

    There are 20 cheese slices in each packet.
    There are 12 burgers in each box.

    Rita buys exactly the same number of cheese slices and burgers.

    (i)  How many packets of cheese slices and how many boxes of burgers does she buy?

    ............................................ packets of cheese slices

    ............................................ boxes of burgers

    Rita wants to put one cheese slice and one burger into each bread roll.
    She wants to use all the cheese slices and all the burgers.

    (ii) How many bread rolls does Rita need?

    ............................................ bread rolls

    **(Total 4 marks)**

6    Ali is planning a party.

He wants to buy some cakes and some sausage rolls.

The cakes are sold in boxes.
There are 12 cakes in each box.
Each box of cakes costs £2.50

The sausage rolls are sold in packs.
There are 8 sausage rolls in each pack.
Each pack of sausage rolls costs £1.20

Ali wants to buy more than 60 cakes and more than 60 sausage rolls.
He wants to buy exactly the same number of cakes as sausage rolls.

What is the least amount of money Ali will have to pay?

£..............................................

**(Total 5 marks)**