Multiples – in context

How to . . .

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 have each cycled when they are next at the start line together.

There are a couple of ways of solving this type of question - less mistakes are made by listing multiples

Matt - 50, 100, 150, 200, 250, 300, 350, 400
450, 500, 550 . . . .

Dan – 80, 160, 240, 320, 400

I can stop here as its in both lists

So Matt and Dan will be at the start when they have both been cycling for 400 s ... thats not what the question asked for....

....count the 'multiples of 50' and 'multiples of 80'

....

Matt 8 **laps**

Dan 5 **laps**

(3)

Now have a go yourself . . .

Q1. Buses to Acton leave a bus station every 24 minutes. Buses to Barton leave the same station every 20 minutes.

A bus to Acton and a bus to Barton both leave the 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?

Q2. 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?

Q3. A ship is at anchor between two lighthouses L and H.

- The light from L shines on the ship every 30 seconds
- The light from H shines on the ship every 40 seconds.

Both lights started at the same time. How often do both lights shine on the ship at once?

Exam Questions

Q1. Bridget has swimming lessons every fifth day and diving lessons every third day.

If she had a swimming lesson and a diving lesson on May 5th - when will be the next date on which she has both swimming and diving lessons?

Q2. Shannon is making identical balloon arrangements for a party. She has 32 maroon balloons, 24 white balloons and 16 orange balloons.

She wants each arrangement to have the same number of each colour balloon.

What is the greatest number of arrangements she can make if every balloon is used.

Ready to be marked ?

Checklist

- ☐ Answers checked
- ☐ Have you answer the question?

Keywords

Things to remember …

What went well …

Teacher comment ..