

Albert the Astronaut



Albert is observing pulsars, a type of star which emit a beam of radiation at regular intervals. He sees two pulsars 'flash' together and notes that one pulsar flashes every 0.4 seconds and the other every 0.7 seconds. How long will he wait before they flash together again?



Boris the Baker



Boris is baking cupcakes for two parties. He has to bake 225 cupcakes for one party and 165 for the other. He needs to buy some new presentation cases for the cupcakes, it is important that these cases fit as many cupcakes in as possible but there can't be any empty spaces in any of the presentation cases. How many cupcakes should each presentation case hold?



Charlie the Channel Swimmer



Charlie is training for her next Channel swim. She has to visit her doctor every 14 days and her nutritionalist every 10 days for regular check ups. If on the 10th May she had both appointments, what will the next date be when both appointments fall on the same day?



Derek the Dentist



Derek advises a patient to have a scale every 4 months and a polish every 6 months. If they have a scale and polish today, how long will they wait before they can have both during the same appointment?



Egbert the Engineer



Egbert has an order for 64 ball bearings for a car company and 352 for a toy company. He has to program his machine to pack the balls in equal batches, but wants to process the orders as fast as possible. What is the largest size batch he uses to ready both orders in one go?



Florence the Financial Advisor



Florence is advising a client who wishes to invest a lot of his money in the foreign stock markets. He is particularly interested in investing money in a French company and an American company. Florence is aware that France generally has a recession every 6 years and America generally has a recession every 8. In the year 2005, both France and America were in recession. Florence needs to work out the next time they will both be in recession so she can withdraw her customers investments to ensure the money lost is minimal. When does she next need to withdraw this money?



Gerard the Gym Instructor



Gerard is planning his outdoor bootcamp sessions. He takes large groups outside and splits them into smaller groups once they are outside. He is sorting out a bag of equipment for each smaller group to use; each bag of equipment needs a skipping rope, medicine ball, mat and pair of dumbbells per person. If he has a class of 18 and 30 on that night, what is the largest amount of people that will be in each smaller group (All groups need to be equal size), and how many dumbbells need to be in each bag?



Ingrid the Interior Designer



Ingrid is wallpapering a room. The wallpaper is 40cm wide and the border pattern repeats every 50cm. She is a perfectionist, and doesn't want to cut the border and ruin the pattern; how far along the wall will she have to wallpaper for them to match up again?



Judy the Juggler



Judy runs two juggling tutorials per week, for one she requires 42 balls and the other 18. She wants to group the balls equally into bags so that she can have exactly the right number for the smaller session without having to open another box. What is the largest size box she can use to do this?



Kevin the Kayak Instructor



ChrisMorinPhotography.com

Kevin and his partner are kayaking. Kevin is much fitter and can paddle every 1 second, whereas his training partner is struggling after a large lunch and can only paddle every 1.4 seconds. If they paddle together now, how long will it be until they next paddle?



Leona the Lorry Driver



Leona delivers furniture to Marks and Spencers in Meadowhall every 10 days, she delivers furniture to Marks and Spencers in Southampton every 12 days. On the 8th of February (not a leap year) she had to deliver to both Meadowhall and Southampton on the same day. A journey that took 6 hours, one of her worst shifts so far. She is trying to work out what the next date would be when she would have to do this journey again so that she could book some annual leave on that day. When would this next dreaded journey be?



Marty the Mechanic



On average one of Marty's shoddy cars needs a new clutch every six weeks and new brake pads every 2 months. If he fits both today, how long before he can change both at the same time again?



ABCW Presents...

Harold the Hairdresser



One of Harold's fussier customers requests a dye every 7 weeks and a hair-cut every 6. Harold hates this moaning diva and wants to ensure that next time she wants both a cut and dye in one appointment, he will have booked a week off. How long in the future should he book his week off?



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ABCW Presents...

Nelly the Naval Officer



There are a group of 24 day shift officers and 40 night shift officers . They are due to patrol and Nelly needs to split them into equal groups so that no ship is left alone. The groups need to be as large as possible for maximum protection. How big is each group?



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ABCW Presents...

Ollie the Optician



Ollie is updating his shop and needs to buy new glasses display cases. He gets glasses in three different brands. Brands cannot be mixed together on the display cases. If he gets 24 cases from one brand, 36 cases from the second and 72 cases from the third, what is the largest amount of glasses each display case can hold to make sure brands are not mixed together and there are no gaps on the shelves?



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ABCW Presents...

Peter the Paramedic



Peter has a 150 litre vat of blood for transfusions and a 280 litre vat of saline solution. What is the largest jug size, in litres, he can use to measure both vats exactly?



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ABCW Presents...

Quentin the Quarryman



In Quentin's quarry there are two explosives teams, who by law have to detonate at noon. One performs their explosions every 14 days and the other every 10 days. The local vicar complained today because both teams detonated at the same time, causing her lunchtime prayer to be interrupted. When should Quentin warn her that this will next happen?



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ABCW Presents...

Roger the Rugby Player



Roger is coaching under 16s at the local school. He is planning training drills and needs to work out how big each training group should be. There will either be 36 or 45 pupils that show up. What is the greatest number of people Roger can put in each training group to ensure all groups are the same size??



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ABCW Presents...

Sally the Stuntwoman



Sally needs to make a death defying jump through two spinning blades. One blade spins every 6 seconds and one every 8 seconds. She sees them spin together and thinks "I definitely don't want to jump next time that happens!" When will this be?



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ABCW Presents...

Tony the Taxi Driver



Tony is well known as one of the best taxi drivers in New York City. He knows every route by heart and even the timings of the traffic lights to ensure he can complete a route in the least amount of time possible. One stretch of road has three traffic lights in a row. At 7am the traffic lights turned green simultaneously. When is the next time they will be green together if the set turn green every 48 seconds, the second every 72 seconds and the third every 108 seconds. When will the next time be when they go green simultaneously?



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ABCW Presents...

Umberto the Umpire



Two matches are taking place. One fielding team completes an over every 10 minutes, whereas the other completes an over every 12 minutes. If the both start an over together now, when will they next start an over together?



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Victor the Veterinarian



Victor is working the night shift alone at the animal hospital . Meaning that only one animal can be seen to at a time. There is a cat and a parrot stopping the night who are seriously ill. They were both given their medication at 16:00 before the other vet went home, leaving Victor alone. If the cat must be medicated every 3 hours and the parrot must be medicated every 5 hours, what time must the morning vet start to ensure that both animals get their medication?



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ABCW Presents...

Wendy the Wedding Planner



Wendy is planning the wedding of a very indecisive couple. The bride wants to invite 210 guests but the husband dislikes a lot of the brides friends and only wants to invite 170. Whilst the couple make up their mind Wendy decides she will plan the table lay out. What is the greatest amount of guests that can go on each table that will satisfy either number of guests?



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ABCW Presents...

Xander the X-ray Technician



Xander has two X-ray machines, an antiquated model which can scan every 18 minutes, and a top of the line number which can scan every 3 minutes. When they both scan at the same time, Xander needs to evacuate his nurses behind the lead screen. If he does this at 12:34am, when will he next schedule an evacuation?



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ABCW Presents...

Yogi the Yachtsman



Yogi is navigating a circular course with two other yachts. They complete laps in 12mins, 10mins and 4mins respectively. They pass under a bridge at noon, and the local photographer missed it, when will he next go to the bridge to get his photograph of all three boats his editor has requested?



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ABCW Presents...

Zelda the Zoologist



Zelda is making a CD of exotic bird noises for children to listen to in the Zoo's educational area. She wants to get her timing right so that the Harriet the Hornbill, Monty the Macaw and Cory the Cockatoo all squawk at the same time. She was informed that at 14:00 they all squawked at the same time. If Harriet squawks every 8 minutes, Monty every 6 minutes and Cory every 10, what time should Zelda get to the bird realm to catch them squawking together again?



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