HCF and LCM Extension

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| Two lighthouses flash at different intervals. One flashes every 24 seconds, and the other every 40 seconds. A ship’s captain sees them flash at the same time. How many minutes will it be before this happens again? | **6** |
| The light on a service vehicle flashes every 20 seconds. The light on a tractor flashes every 10 seconds. As they pass each other on a road, the lights flash together. How many seconds will it be before this happens again? | **24** |
| Doughnuts are sold in packs of 8. Cakes are sold in packs of 14. What is the smallest number of cakes and the smallest number of doughnuts that can be bought so their numbers are equal? | **20** |
| A car’s service book states that the air filter must be replaced every 10000 miles and the diesel fuel filter every 24000 miles. After how many thousand miles will both need replacing at the same time? | **30** |
| A buzzer buzzes every 4 seconds and a bell rings every 6 seconds. The buzzer and bell start at the same time. How many times in the first minute will the make a sound at the same time? | **56** |
| Alan and Bob are running in a circle, Alan completes one revolution in 4 minutes and Bob completes one revolution in 7 minutes. They start running together, after how many minutes will Alan and Bob will meet at the starting point? | **2** |
| Samantha has two pieces of cloth. One piece is 72 inches wide and the other piece is 90 inches wide. She wants to cut both pieces into strips of equal width that are as wide as possible. How wide should she cut the strips? | **18** |
| Ben exercises every 12 days and Isabel every 8 days. Ben and Isabel both exercised today. How many days will it be until they exercise together again? | **8** |
| Mrs. Evans has 120 crayons and 30 pieces of paper to give to her students. What is the largest number of students she can have in her class so that each student gets equal number of crayons and equal number of paper? | **120** |
| I am planting 50 apple trees and 30 peach trees. I want the same number and type of trees per row. What is the maximum number of trees I can plant per row? | **28** |