

Answers to Task 2 Number work for W/C 1st June 2020

Write the answers in your book, showing any relevant workings i.e. the list of factors or the first few multiples until you find the same number in both lists (*common to both*)

Question 1.

Hot-dog sausages are sold in packs of 10 and hot-dog buns are sold in packs of 8. How many of each do you have to buy to have complete hot dogs with no wasted sausages or buns?

ANSWER: 4 packs of sausages and 5 packs of buns (or any multiple of these)

Question 2.

A bell chimes every 6 seconds. Another bell chimes every 5 seconds. If they both chime together, how many seconds will it be before they both chime together again?

ANSWER: 30 seconds

Question 3.

Fred runs round a running track in 4 minutes. Debbie runs round in 3 minutes. If they both start together on the line at the end of the finishing straight, when will they both be on the same line together again? How many laps will Debbie have run? How many laps will Fred have run?

ANSWER: 12 minutes. Debbie will have run 4 laps and Fred will have run 3 laps

Question 4: (The trees should be part of your answer)

Write these numbers as products of their primes:

- | | | | |
|-------|----------------|--------|---------------------------|
| 1) 24 | $2^3 \times 3$ | 6) 42 | $2 \times 3 \times 7$ |
| 2) 40 | $2^3 \times 5$ | 7) 60 | $2^3 \times 3 \times 5$ |
| 3) 35 | 5×7 | 8) 124 | $2^2 \times 31$ |
| 4) 18 | 2×3^2 | 9) 300 | $2^2 \times 3 \times 5^2$ |
| 5) 28 | $2^2 \times 7$ | 10) 54 | 2×3^3 |

Question 5:

Use this method to find the HCF and LCM between the following numbers:

- | | | |
|--------------|------------------|-----------|
| 1) 32 and 12 | HCF = 4 | LCM = 96 |
| 2) 16 and 20 | HCF = 4 | LCM = 80 |
| 3) 35 and 18 | HCF = isn't one! | LCM = 630 |
| 4) 24 and 30 | HCF = 6 | LCM = 120 |
| 5) 30 and 42 | HCF = 6 | LCM = 210 |
| 6) 70 and 56 | HCF = 14 | LCM = 280 |