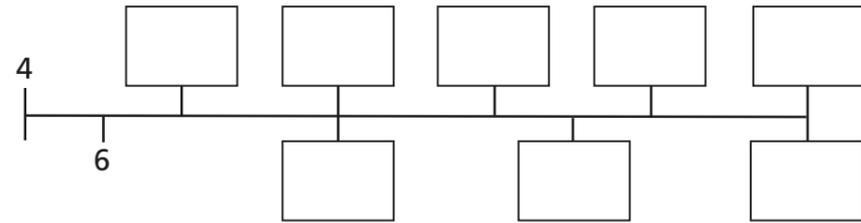# Find common multiples of a set of numbers including the LCM

1 a) Write the next five multiples of 4 above the number line.

b) Now write the next three multiples of 6 below the number line.

c) Use the number line to find two common multiples of 4 and 6

☐ and ☐

d) What is the lowest common multiple (LCM) of 4 and 6? ☐

2 a) Write the first ten multiples of 10

_____

b) Write the first ten multiples of 8

_____

c) Use your lists from parts a) and b) to give common multiples of 10 and 8

_____

d) What is the lowest common multiple (LCM) of 10 and 8? ☐

3 a) Write the first ten multiples of 12

_____

b) Write the first ten multiples of 18

_____

c) Use your lists from parts a) and b) to give common multiples of 12 and 18

_____

d) What is the LCM of 12 and 18? ☐

4 Find the LCMs of each pair of numbers.

a) 30 and 50   **b)** 16 and 24

☐   ☐

5

To find the LCM of two numbers you just multiply them together.

For example, the LCM of 3 and 4 is 12 because 3 × 4 = 12

Is Teddy correct? _____

Explain your answer.

_____

_____

6 Complete the sentences using the correct term.

lowest common multiple		highest common factor

a) 12 is the _____ of 12 and 36

b) 12 is the _____ of 12 and 6

7 Nijah has two number cards.

14		?

The lowest common multiple of the two cards is 84

Find two possible values for the other card.

☐ ☐

Discuss your strategy with a partner.

8 A toad jumps 12 cm each time it jumps.

A frog jumps 15 cm each time it jumps.

The toad and the frog are lined up and start jumping from the same point.

After how many centimetres will they be lined up again?

☐ cm

9 Find the lowest common multiple of each set.

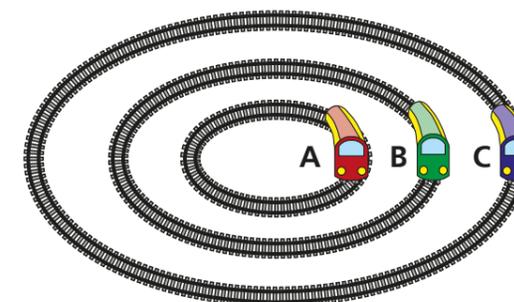**a)** 3, 4 and 6   **b)** 4, 6 and 10

☐   ☐

c) $2x$ and $6x$ **d)** $2x$ and $3x^2$

_____   _____

10 Three toy trains are on different tracks.

Kim lines up the trains and sets them off.

- Train A takes 15 seconds to complete a circuit.
- Train B takes 20 seconds to complete the circuit.
- Train C takes 35 seconds to complete the circuit.

a) After how many minutes will the trains next line up in the same position?

☐ minutes

b) How many more circuits does train A complete than train C in this time?

☐

11 Ron thinks of two numbers.

> The LCM of my two numbers is 45
> The HCF is 3

Work out two possible numbers that Ron could be thinking of.

☐ ☐

Compare answers with a partner.