

Maths about me: a first-lesson icebreaker for CBSE Class 9 and 10

CBSE Math Revision · CBSE Class 9 and 10 · Student sheet

Name _____

Class _____

Date _____

No calculator. Every answer is a whole number or an exact fraction.

Starter (5 minutes)

1. I am a two-digit prime. My digits add up to 10 and my tens digit is bigger than my units digit. Who am I?
2. I am a square number between 50 and 100, and I am 1 more than a multiple of 8. Who am I?
3. I am the HCF of 96 and 404. Who am I?
4. I am the smallest number that 8, 9 and 12 all divide exactly. Who am I?

Main activity (35 minutes)

Task A: Maths about me

Work through Ravi's made-up numbers first. Then do the same with your own birthday and house number on paper.

- a. Ravi's birthday is the 18th, and his house number is 120. Write 18 and 120 as products of primes.
- b. Find the HCF and the LCM of 18 and 120. Check that $\text{HCF} \times \text{LCM} = 18 \times 120$.
- c. Ravi was born in month 8, so he writes 1808. Write 1808 as a product of primes, and find the HCF of 1808 and 18.

Task B: 'Who am I?' in pairs

Solve these with a partner. Then each write a riddle of your own with exactly one answer and swap.

- a. I am between 100 and 200. I am a multiple of 7 and of 11, and my digits add up to 10. Who am I?
- b. I am the smallest number bigger than 1 that leaves remainder 1 when divided by 2, 3, 4, 5 or 6. Who am I?
- c. I am a rational number between $\frac{1}{3}$ and $\frac{1}{2}$. Written in lowest terms, my denominator is 12. Who am I?

Task C: Four 4s

Use exactly four 4s with $+$, $-$, $\times$, $\div$ and brackets to make each target. You may also join two 4s to make 44. Other answers are possible.

- a. Make 2.
- b. Make 7.
- c. Make 9.
- d. Make 20.

Extension

1. Make 15 and 17 with four 4s.
2. Find every two-digit number that is 4 times the sum of its digits.