

19th Mar '25

→ See AI notes on factoring, GCD, LCM
and where they are helpful
(simplifying fractions, adding fractions)

→ Eg: 1 Factorize 237

$$3 \times 79 = 237$$

Eg: 2

Factorize 995

$$5 \times 199 = 995$$

Eg: 3

Factorize 352

$$\begin{aligned} 352 &= 2 \times 176 = 2 \times 2 \times 88 = 2 \times 2 \times 2 \times 44 \\ &= 2 \times 2 \times 2 \times 2 \times 22 = 2^5 \times 11 \end{aligned}$$

→ See AI notes on rules/tricks of divisibility
and why these rules work

HW: For each of these rules/tricks, write
which properties of numbers are
being used

Eg: Divisibility by 4:

$$\frac{abcde}{4} = \frac{abc \times 100 + de}{4}$$

$$= \left(abc \times \frac{100}{4} \right) + \frac{de}{4}$$

(right
distributive
law for /)

$$= abc \times 25 + \frac{de}{4}$$

So, abcde is divisible by 4 if the left 2 digits are
divisible by 4.

HW: Complete HW exercises to
check divisibility