

WRITING RECURRING DECIMALS AS FRACTIONS

a) **Change the recurring fraction 0.88 into a fraction**

$$\text{Let } x = 0.88888 \dots$$

$$10x = 8.8888\dots$$

$$10x - x = [8.8888\dots] - [0.8888\dots]$$

$$9x = 8$$

$$x = \frac{8}{9}$$

b) **Change the recurring fraction 9.878787.. into a fraction**

$$\text{Let } x = 9.878787\dots$$

$$100x = 987.8787\dots$$

$$100x - x = [987.8787\dots] - [9.878787\dots]$$

$$99x = 978$$

$$x = \frac{978}{99}$$

Note: Always set the given number as x. Next multiply the given number by 10,100,100, in-fact by just any power of 10 that will help you to do away with the recurring part of the fraction after subtraction. Finally always cross check the answer thus obtained in-order to reconfirm.