

Series and applications



Applications to recurring decimals

QUESTION 1 Express each recurring decimal as an infinite geometric series:

a $0.\dot{8}$

b $0.\dot{3}5$

QUESTION 2 Express each recurring decimal as an infinite geometric series and hence as a rational number:

a $0.\dot{2}$

b $0.4\dot{2}$

c $0.\overline{105}$

d $0.2\dot{7}$

e $1.8\dot{7}$

f $0.\overline{8235}$

