a)

Work out $0.\dot{6} \times 0.\dot{5}\dot{4}$ giving your answer as a fraction in its simplest form.

Can we write the decimals as fractions?	$x = 0.\dot{6}$ $10x = 6.\dot{6}$ $9x = 6$ $x = \dfrac{6}{9} = \dfrac{2}{3}$ $y = 0.\dot{5}\dot{4}$ $\cancel{10y = 5.\dot{4}\dot{5}}$ $100y = 54.\dot{5}\dot{4}$ $99y = 54$ $y = \dfrac{54}{99} = \dfrac{6}{11}$
Can we re-write the multiplication using fractions?	$\dfrac{2}{3} \times \dfrac{6}{11} = \dfrac{12}{33}$
What is this in its simplest form?	$\dfrac{12}{33} = \dfrac{4}{11}$

b)

Work out $0.\dot{3} \times 0.\dot{8}\dot{1}$ giving your answer as a fraction in its simplest form.

Can we write the decimals as fractions?	$x = 0.\dot{3}$ $10x = 3.\dot{3}$ $9x = 3$ $x = \dfrac{3}{9} = \dfrac{1}{3}$ $y = 0.\dot{8}\dot{1}$ $\cancel{10y = 8.\dot{1}\dot{8}}$ $100y = 81.\dot{8}\dot{1}$ $99y = 81$ $y = \dfrac{81}{99} = \dfrac{9}{11}$
Can we re-write the multiplication using fractions?	
What is this in its simplest form?	

c)
Work out $1.\dot{2} \times 0.\dot{1}\dot{8}$ giving your answer as a fraction in its simplest form.

Can we write the decimals as fractions?	$$x = 1.\dot{2}$$ $$10x = 12.\dot{2}$$ $$9x = 11$$ $$x = \frac{11}{9}$$
Can we re-write the multiplication using fractions?	
What is this in its simplest form?	

d)
Work out $0.\dot{6} \times 0.1\dot{8}$ giving your answer as a fraction in its simplest form.

BACKWARD FADED MATHS