

a Write $0.\dot{6}3$ as a fraction in its simplest form $\frac{7}{11}$ a two digit cycle, then simplify	b Write $0.7\dot{3}$ as a fraction in its simplest form $\frac{11}{15}$ a fixed digit before the cycle	c Write $1.\dot{4}$ as an improper fraction $\frac{13}{9}$ a whole number part, improper	d $x = 0.\dot{1}2\dot{3}$. Which of $10x$, $100x$ or $1000x$ do you subtract x from? $1000x$ the power of ten for the cycle
e Write $0.2\dot{4}5$ as a fraction in its simplest form $\frac{27}{110}$ a fixed digit, then a two digit cycle	f Does $\frac{21}{56}$ give a terminating or a recurring decimal? terminating simplify before the denominator test	g $\frac{1}{7} = 0.\dot{1}4285\dot{7}$. What is the 20th decimal place? 4 a digit far along the cycle	h $\frac{1}{n} = 0.\dot{0}3$. Find n . $n = 33$ working back to the fraction
i Work out $\sqrt{0.\dot{4}}$. Give your answer as a fraction. $\frac{2}{3}$ the root of a recurring decimal	j Work out $(0.\dot{3})^{-2}$ 9 a negative power	k a and b are digits. Write $0.\dot{a}b$ as a fraction. $\frac{10a + b}{99}$ a two digit cycle as letters	l a and b are digits. Write $0.a\dot{b}$ as a fraction. $\frac{9a + b}{90}$ a fixed digit and a cycle as letters

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